



Operation/Reference Guide

Metreau™ Keypads

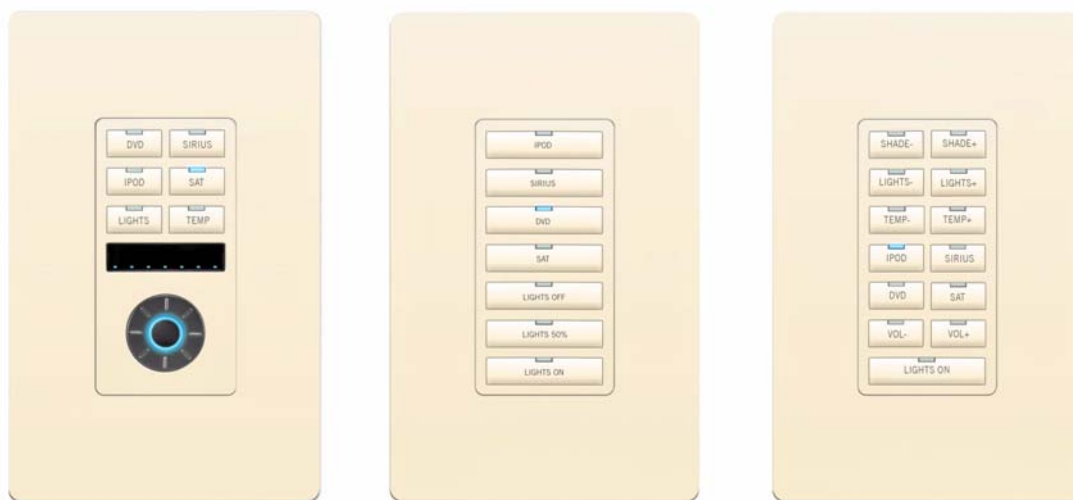
MET-6N 6-Button Keypad with Navigation

MET-7 7-Button Keypad

MET-13 13-Button Keypad

DAS-MET6SRC 6-Source Audio Keypad

DAS-MET-NUM Numeric Audio Keypad



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Table of Contents

Metreau™ Keypads	1
Overview	1
Metreau Keypads (AxLink Compatible)	1
Metreau Audio Keypads (SWT Compatible)	1
Overview - Speaker Wire Technology (SWT)	1
MET-6N Metreau 6-Button Keypad with Navigation	2
MET-6N Specifications	3
Navigation Wheel	3
Pushbuttons 7-11	3
Navigation Wheel	4
MET-7 Metreau 7-Button Keypad	4
MET-7 Specifications	4
MET-13 Metreau 13-Button Keypad	5
MET-13 Specifications	5
DAS-MET-6SRC Metreau 6-Source Audio Keypad	6
DAS-MET-6SRC Specifications	6
Pushbuttons 1-6	7
Navigation Wheel	7
DAS-MET-NUM Metreau Numeric Audio Keypad	8
DAS-MET-NUM Specifications	8
Custom Button Installation	9
Overview	9
Removing Buttons	9
Button Kits	10
Audio	10
Residential	10
Commercial	10
Custom Keypads and Buttons	11
AxLink Device Addressing	13
Overview	13
Device Addressing on MET-6N Keypads	13
Setting The AxLink Device Address	13
Mounting and Installation	15
Overview	15
Mounting Dimensions	15
MET-6N, DAS-MET-6SRC	15
MET-7	16

MET-13, DAS-MET-NUM	17
Mounting Procedures	17
Wallbox Mounting.....	17
Podium Mounting.....	18
Accent Frame	18
Wiring and Connections	19
Overview	19
AxLink Wiring	19
MET-6SRC, MET-7 and MET-13 Rear Panel Components	19
AxLink Wiring Guidelines	19
Preparing Captive Wires	20
AxLink Data and Power Connections	20
Using AxLink for Data with an Auxiliary Power Supply	20
AxLink Status LED	21
SWT Wiring	21
DAS-MET-6SRC and DAS-MET-7 Rear Panel Components	21
Cable Type	21
Preparing Captive Wires	21
DAS-MET-6SRC - SWT Data and Power Connections	22
Tango System Integration Drawings	23
Tango System Integration Drawing - Using Four-Conductor Speaker Wire	23
Tango System Integration Drawing - Using the Audio Zone Expander	23
SWT Special Wiring Configurations	24
Auxiliary Amplifier Configuration	24
Remote Amplifier Configuration	24
Two-Wire Configurations – Keypad for Control Only	25
Split Zone / Analog Volume Control	26
Programming The Metreau Keypads	27
Programming the AxLink Metreau Keypads	27
Button Layouts	27
Programming the Navigation Wheel (MET-6N)	27
Navigation Wheel - Buttons 7-11	28
Navigation Wheel - Buttons 12-13	28
Navigation Wheel - Level Control.....	28
Display Bargraph.....	28
Supported SEND_LEVELs.....	28
SEND_LEVEL	28
Supported SEND_COMMANDs.....	29
@BRT	29
@WBRT	29
BMODE	29

LED Feedback for 2-Position Pushbuttons	30
Sending Firmware to Metreau Keypads (AxLink)	30
Device Addressing on MET-6N Keypads	30
Programming the SWT Metreau Keypads	31
Basic Keypad Functions - DAS-MET-6SRC	33
Overview	33
DAS-MET-6SRC - Listening To a CD or DVD	33
Selecting The Source for Playback	33
Changing Tracks	33
Pausing Playback	33
Listening To an iPod	34
Listening To the Radio	34
Adjusting Volume	34
DAS-MET-6SRC - Audio Adjustment Mode	35
Adjusting Bass Level For a Room/Zone	35
Adjusting Treble Level For a Room/Zone	35
Adjusting Balance For a Room/Zone	36
Adjusting SRS Settings For a Room/Zone	36
Turning SRS Off	37
DAS-MET-6SRC - Privacy Mode Off/On	37
Turning Privacy Mode Off	37
Working With Sources	38
DAS-MET-6SRC - Zone Control (On/Off)	38
Turning a Single Zone On/Off	38
Turning On a Source In All Zones	38
Turning Off/On a Source In All Zones	39
Turning Off All Zones (System OFF)	39
DAS-MET-6SRC - Zone Control (Dynamic Pause)	40
Single Zone Listening To Source	40
Multiple Zones Listening To The Same Source	40
DAS-MET-6SRC - Using the Navigation Wheel	41
Using the Navigation Wheel With the Internal AM/FM Tuner	41
Advanced Functions - DAS-MET-6SRC	45
Overview	45
Direct Access	45
On-Board Tuner - Direct Selection of a Radio Station	45
CD Player - Direct Selection of a Disk and Track	46
CD Player - Direct Selection of a Track On the Current Disk	46
Cable and Satellite - Direct Selection of a Channel	47
Working With Presets	47

Creating A Preset	47
Recalling A Preset	48
Clearing All Presets	49
Working With Favorites	49
Creating a Favorite For a Specific Source	49
Clearing Favorites For All Sources In a Specific Zone	50
Working With Zone Grouping.....	50
Adding a Zone To a Group	50
Grouping All Zones	51
Un-Grouping All Zones	51
Grouping Volume Control	52
Working With Alarms.....	52
Setting the System Clock on the Tango Audio Controller.....	52
Setting an Alarm In a Zone	53
Clearing the Alarm For a Specific Zone	53
Clearing All Alarms For All Zones	54
Keypad Lockout.....	54
Locking a Keypad	54
Unlocking a Keypad	55
Unlocking All Keypads	55
Using the NetLinx Module	61
Overview	61
Main Page (Initial View)	61
Main Pages	62
Location/Device Pages	62
Zone Options	63
Change Source	63
Device Control Pages.....	64
Internal Tuner.....	64
Internal Sirius.....	65
DVD.....	66
CD	67
Audio Server	68
Satellite	69
External Tuner.....	70
Other.....	71
Setup Pages.....	72
Setup - Zones	72
Setup - Alarms.....	73
Adding an Alarm	73

Removing an Alarm	75
SWT Troubleshooting	77
Overview	77
Power Connections	77
Zone Connection Problems.....	78
Dead Zones	78
LED Does Not light	78
Source Connections.....	78
No Keypad Activity.....	79
Keypad Lights, No Sound	79

Metreau™ Keypads

Overview

Metreau keypads are a convenient, versatile, cost-effective option for achieving effortless control of virtually anything through a NetLinX® control system. Metreau keypads offer easy installation within decora-style wall plates and sleek styling that complements the NI-3101-SIG Signature Series NetLinX Integrated Controller and Tango Distributed Audio System.

There are two basic variations within the Metreau device family:

Metreau Keypads (AxLink Compatible)

The MET-6N, MET-7 and MET-13 keypads are AxLink-compatible, for use with NetLinX control systems (FIG. 1).

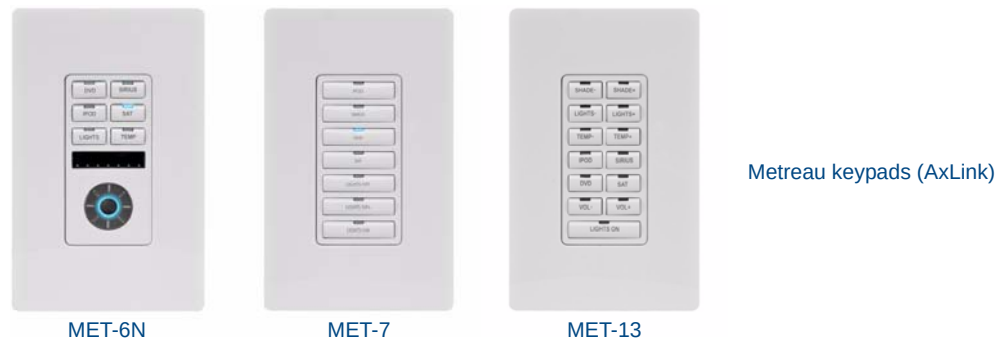


FIG. 1 Metreau keypads

Metreau Audio Keypads (SWT Compatible)

The DAS-MET-6SRC and DAS-MET-NUM are SWT-compatible, for use with Matrix Audio distribution systems, via Speaker Wire Technology (SWT). Metreau Audio keypads are compatible with all Matrix products including Tango and Mi Series Audio Controllers as well as XA Carbon Series Amplifiers (FIG. 2).



FIG. 2 Metreau Audio keypads



NOTE

In terms of SWT functionality, the Metreau Audio keypads (DAS-MET-6SRC & DAS-MET-NUM) are a close match to previous versions of Matrix KP and NUM keypads.

Overview - Speaker Wire Technology (SWT)

Speaker Wire Technology (SWT) allows both data and audio signals to travel over the same four conductor wire. This remarkable technology removes the need for control wire since the control and audio signals are shared on the same wire. The reliability and simplicity of this system has been proven for years. AMX Matrix Audio is the only company that offers a “retrofit solution”, one which allows the replacement of volume controls with AMX Matrix Audio keypads and Controllers, giving full control over the sources.

Additionally, the versatility of SWT also allows AMX Matrix Audio products to be connected where the control wire has been run separately from the speaker cable.

All Metreau keypads are available in three popular colors: White, Black and Light Almond. The following table lists the keypads in the Metreau family, with descriptions and FG#s for each color.

Metreau Keypads Device Family		
Name	Description	Colors/FG#s
MET-6N	Metreau 6-Button Keypad with Navigation	• White (FG5794-01-WH) • Black (FG5794-01-BL) • Light Almond (FG5794-01-LA)
MET-7	Metreau 7-Button Keypad	• White (FG5794-03-WH) • Black (FG5794-03-BL) • Light Almond (FG5794-03-LA)
MET-13	Metreau 13-Button Keypad	• White (FG5794-02-WH) • Black (FG5794-02-BL) • Light Almond (FG5794-02-LA)
DAS-MET-6SRC	Metreau 6-Source Audio Keypad	• White (FG1122-01-WH) • Black (FG1122-01-BL) • Light Almond (FG1122-01-LA)
DAS-MET-NUM	Metreau Numeric Audio Keypad	• White (FG1122-02-WH) • Black (FG1122-02-BL) • Light Almond (FG1122-02-LA)

MET-6N Metreau 6-Button Keypad with Navigation

The MET-6N 6-button keypad features source control, visual volume feedback and a navigation wheel that adjusts volume and provides up, down, left, right and center button options (FIG. 3).

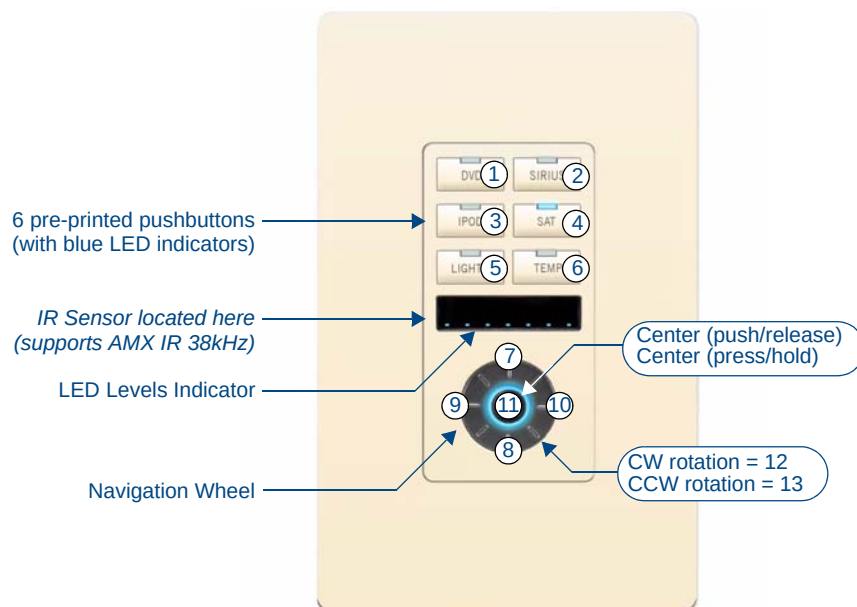


FIG. 3 MET-6N Metreau 6-Button keypad with Navigation (Light Almond shown)

The MET-6N is an AxLink keypad, suitable for use in NetLinX Control Systems.

MET-6N Specifications

MET-6N Specifications	
Power:	12 VDC, 75 mA
Front Panel Components:	• Pushbuttons - 6 tactile pushbuttons with blue LED indicators that illuminate when pressed to confirm the source/function was selected and that it is currently being used. These pre-printed buttons are field-replaceable. • IR Sensor - Supports standard AMX IR (38 kHz only). • LED Levels Indicator - set of 7 blue LEDs provide level feedback. • Navigation Wheel - consists of 5 pushbuttons: 4 directional pushbuttons (Up, Down, Right, Left), 1 center pushbutton, and bi-directional rotating wheel for channel adjustments. • The Navigation wheel itself provides two button functions as well (rotate CW = button #12, and rotate CCW = button #13, as indicated in FIG. 4).
Rear Panel Components:	• DIP switch - 8 position mini DIP switch used to set the device address for the keypad on the AxLink Bus (1-255). • AxLink connector - 4 pin 3.5mm Phoenix connector for AxLink connection to the NetLinx Master.
Dimensions (HWD):	• Keypad and Mounting Plate: 4.055" x 1.772" x 0.997" (103mm x 45mm x 25.32mm) • Mounts into standard decora-style wall plates.
Weight:	2.4 oz. (68.04 g)
Operating Environment:	• Operating Temperature: 32° - 104° F (0° - 40° C). • Relative Humidity: 5% - 85%, non-condensing. • Intended for indoor use only.
Certifications:	• FCC Class B • CE • IEC60950 • RoHS
Colors:	• White (FG5794-01-WH) • Black (FG5794-01-BL) • Light Almond (FG5794-01-LA)
Optional Accessories:	• Single Button Kit (FG5794-10) • Lutron Cairo Wallplates (available in a variety of sizes and colors)

Navigation Wheel

FIG. 4 shows the button layout of the Navigation Wheel:

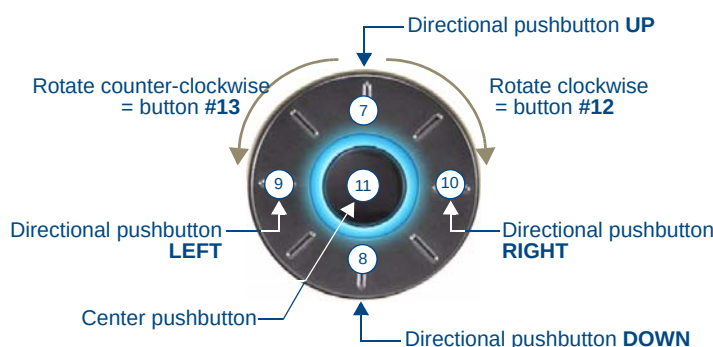


FIG. 4 Navigation Wheel - button layout

Pushbuttons 7-11

The top, bottom, left, right and center points on the Navigation Wheel are pushbuttons #7, #8, #9, #10 and #11, and can be programmed like any other AxLink button.

Navigation Wheel

The Navigation Wheel itself can be rotated clockwise and counterclockwise, and is intended to provide level control (for example volume or lighting levels).

- When rotated clockwise, the Navigation Wheel provides a channel event on button #12.
- When rotated counter-clockwise, the Navigation Wheel provides a channel event on button #13.
- The light on the Navigation Wheel can be illuminated by activating channel #11.

MET-7 Metreau 7-Button Keypad

The MET-7 offers 7 double-width buttons that can be used as in individual keypad or in conjunction with the 6N and 13-button Metreau keypads (FIG. 3).

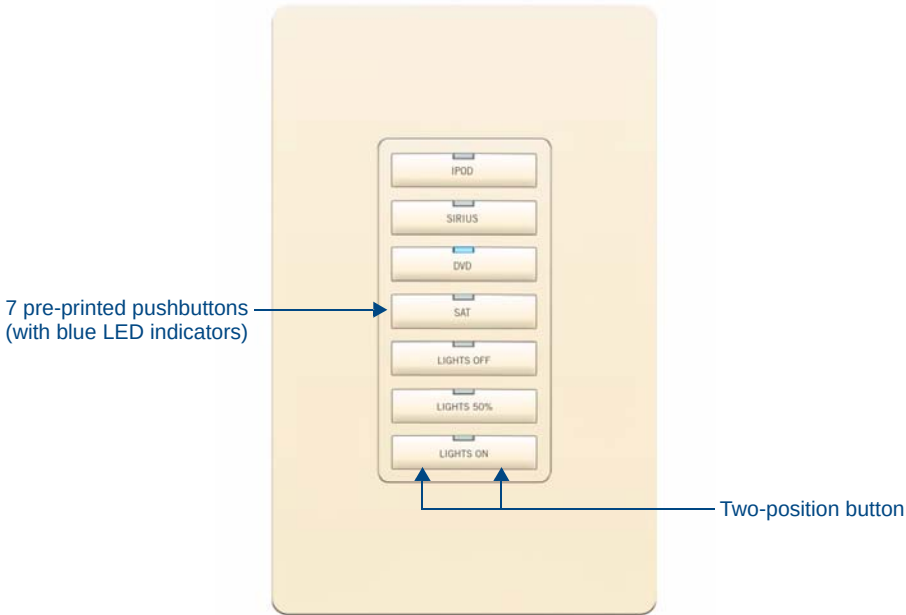


FIG. 5 MET-7 Metreau 7-Button keypad (Light Almond shown)

The MET-7 is an AxLink keypad, suitable for use in NetLinx Control Systems.

MET-7 Specifications

MET-7 Specifications	
Power:	12 VDC, 30 mA
Front Panel Components:	Pushbuttons - 7 tactile pushbuttons with blue LED indicators that illuminate when pressed to confirm the source/function was selected and that it is currently being used. These pre-printed buttons are field-replaceable. The bottom button functions as 2 buttons - there are 2 positions (left and right) that allow the user to control channel/levels (up/down).
Rear Panel Components:	• DIP switch - 8-position mini DIP switch used to set the device address for the keypad on the AxLink Bus (1-255). • AxLink connector - 4-pin 3.5mm Phoenix connector for AxLink connection to the NetLinx Master.
Dimensions (HWD):	• Keypad and Mounting Plate: 4.055" x 1.772" x 0.818" (103mm x 45mm x 207mm) • Mounts into standard decora-style wall plates.
Weight:	2.4 oz. (68.04 g)
Operating Environment:	• Operating Temperature: 32° - 104° F (0° - 40° C). • Relative Humidity: 5% - 85%, non-condensing. • Intended for indoor use only.

MET-7 Specifications (Cont.)	
Certifications:	• FCC Class B • CE • IEC60950 • RoHS
Colors:	• White (FG5794-03-WH) • Black (FG5794-03-BL) • Light Almond (FG5794-03-LA)
Optional Accessories:	• Single Button Kit (FG5794-10) • Double Button Kit (FG5794-11) • Lutron Cairo Wallplates (available in a variety of sizes and colors)

MET-13 Metreau 13-Button Keypad

The MET-13 offers 13 buttons (12 single-width and 1 double-width) and can be used as in individual keypad or in conjunction with the 6N and 7-button Metreau keypads (FIG. 3).

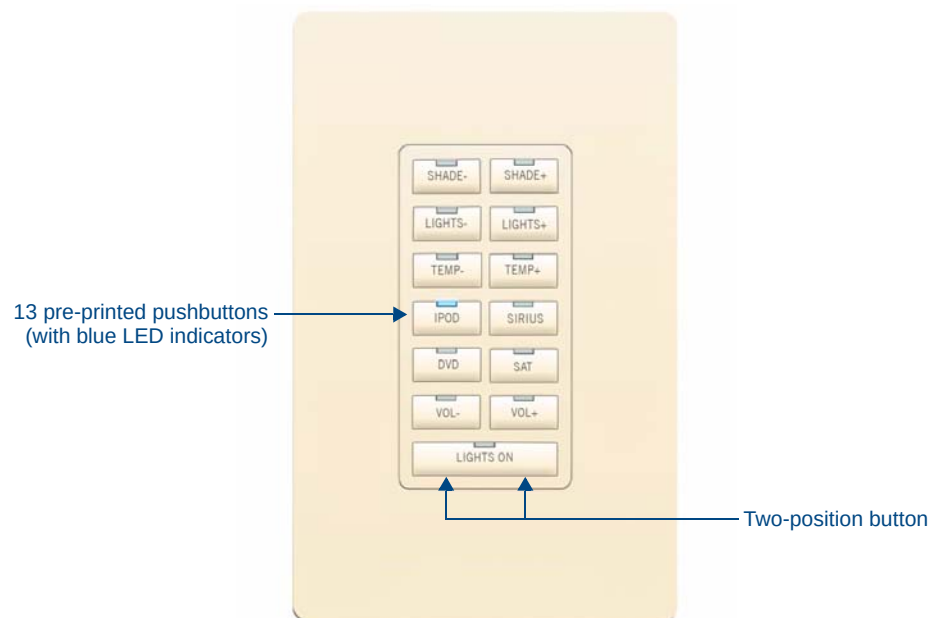


FIG. 6 MET-13 Metreau 13-Button keypad (Light Almond shown)

The MET-13 is an AxLink keypad, suitable for use in NetLinx Control Systems.

MET-13 Specifications

MET-13 Specifications	
Power:	12 VDC, 30 mA
Front Panel Components:	Pushbuttons - 13 tactile pushbuttons with blue LED indicators that illuminate when pressed to confirm the source/function was selected and that it is currently being used (12 single-width, 1 double-width). These pre-printed buttons are field-replaceable. The bottom button functions as 2 buttons - there are 2 positions (left and right) that allow the user to control channels (up/down).
Rear Panel Components:	• DIP switch - 8-position mini DIP switch used to set the device address for the keypad on the AxLink Bus (1-255). • AxLink connector - 4-pin 3.5mm Phoenix connector for AxLink connection to the NetLinx Master.
Dimensions (HWD):	• Keypad and Mounting Plate: 4.055" x 1.772" x 0.818" (103mm x 45mm x 207mm) • Mounts into standard decora-style wall plates.
Weight:	2.4 oz. (68.04 g)

MET-13 Specifications (Cont.)	
Operating Environment:	- Operating Temperature: 32° - 104° F (0° - 40° C). - Relative Humidity: 5% - 85%, non-condensing. - Intended for indoor use only.
Certifications:	- FCC Class B - CE - IEC60950 - RoHS
Colors:	- White (FG5794-02-WH) - Black (FG5794-02-BL) - Light Almond (FG5794-02-LA)
Optional Accessories:	- Single Button Kit (FG5794-10) - Double Button Kit (FG5794-11) - Lutron Cairo Wallplates (available in a variety of sizes and colors)

DAS-MET-6SRC Metreau 6-Source Audio Keypad

The DAS-MET-6SRC 6-button keypad (FIG. 3) features source control, visual volume feedback and a navigation wheel that adjusts volume and provides up, down, left, right and center button options (see the *Basic Keypad Functions - DAS-MET-6SRC* section on page 33 for information).

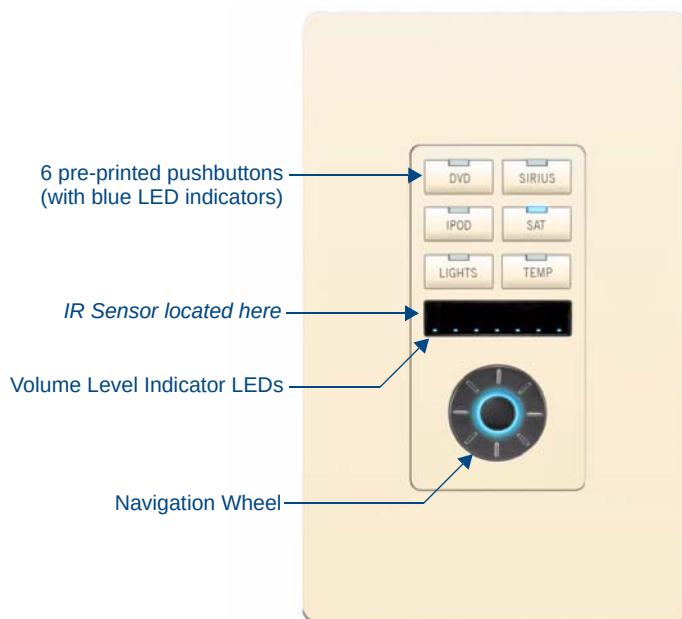


FIG. 7 DAS-MET-6SRC Metreau 6-Source Audio keypad (Light Almond shown)

The DAS-MET-6SRC is a SWT keypad, suitable for use in Matrix Distributed Audio Systems.

DAS-MET-6SRC Specifications

DAS-MET-6SRC Specifications	
Power:	12 VDC, 125 mA
Front Panel Components:	- Pushbuttons - 6 tactile pushbuttons with blue LED indicators that illuminate when the source is selected, and stay lit until the source is turned off. These pre-printed buttons are field-replaceable. - IR Sensor - Works specifically with the MIO-R1-AUDIO remote controller (38 kHz only). - LED Levels Indicator - set of 7 blue LEDs provide volume level feedback. - Navigation Wheel - consists of 5 pushbuttons: 4 directional pushbuttons (Up, Down, Right, Left), 1 center pushbutton, and bi-directional rotating wheel for volume adjustments. Note that the center pushbutton is dual-purpose: a push/release provides one function, while a press/hold provides another.

DAS-MET-6SRC Specifications (Cont.)	
Rear Panel Components:	Wiring connection - Two 4-pin SWT connectors that provide connection from the Matrix Audio Controller, and to the speakers.
Dimensions (HWD):	- Keypad and Mounting Plate: 4.055" x 1.772" x 0.997" (103mm x 45mm x 25.32mm) - Mounts into standard decora-style wall plates.
Weight:	2.4 oz. (68.04 g)
Operating Environment:	- Operating Temperature: 32° - 104° F (0° - 40° C). - Relative Humidity: 5% - 85%, non-condensing. - Intended for indoor use only.
Certifications:	- FCC Class B - CE - IEC60950 - RoHS
Colors:	- White (FG1122-01-WH) - Black (FG1122-01-BL) - Light Almond (FG1122-01-LA)
Optional Accessories:	- Single Button Kit (FG5794-10) - Lutron Cairo Wallplates (available in a variety of sizes and colors)

Pushbuttons 1-6

The top, bottom, left and right points on the Navigation Wheel are used for source control and can be programmed to provide any source functionality by learning the applicable IR code.

The center pushbutton is dual-purpose: a push/release on this button provides one function, while a press/hold provides another. The center pushbutton are also used for source control and can be programmed to provide any source functionality (again, by learning the applicable IR code).

Navigation Wheel

FIG. 8 shows the button layout of the Navigation Wheel:

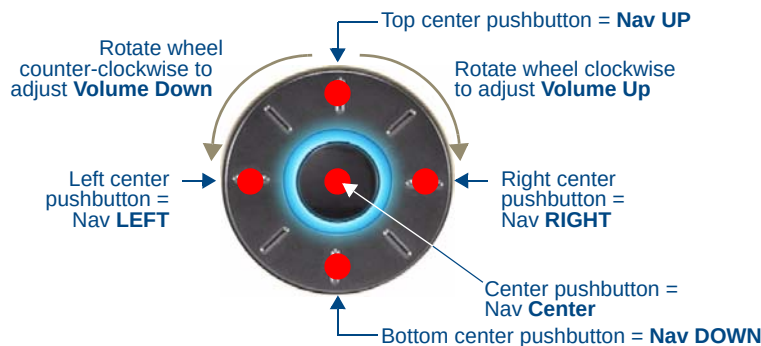


FIG. 8 Navigation Wheel - button layout

The Navigation Wheel can be rotated bi-directionally, and provides volume level control:

- Clockwise rotation increases the volume level, counter-clockwise rotation decreases the volume level.
- The range for volume is 0 - 70.

DAS-MET-NUM Metreau Numeric Audio Keypad

The DAS-MET-NUM Metreau numeric keypad (FIG. 9) connects to the Main DAS-MET-6SRC keypad via a 14-pin connector. Used in conjunction with the DAS-MET-6SRC Metreau keypad, it provides direct numeric access, setting & recalling presets, and access to advanced functionality such as grouping, Setting Favorites, Alarm, and Keypad lockout functionality (see the *Advanced Functions - DAS-MET-6SRC* section on page 45 for information).

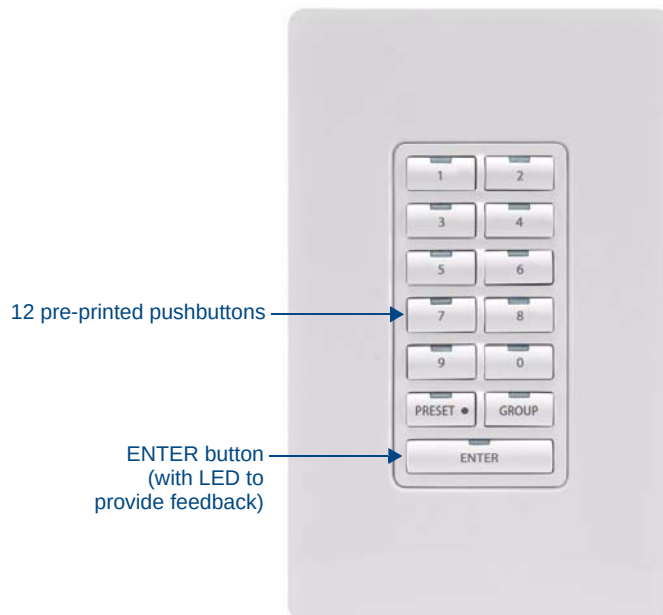


FIG. 9 DAS-MET-NUM Metreau Numeric Audio keypad (White shown)

The DAS-MET-NUM is a SWT keypad, suitable for use in Matrix Distributed Audio Systems.

DAS-MET-NUM Specifications

DAS-MET-NUM Specifications	
Power:	12 VDC, 125 mA
Front Panel Components:	Pushbuttons - 13 tactile pushbuttons.
Rear Panel Components:	Wiring connection - One 14-pin connector that provides connection to the main 6 Source Metreau Keypad (DAS-MET-6SRC).
Dimensions (HWD):	- Keypad and Mounting Plate: 4.055" x 1.772" x 0.818" (103mm x 45mm x 207mm) - Mounts into standard decora-style wall plates.
Weight:	2.4 oz. (68.04 g)
Operating Environment:	- Operating Temperature: 32° - 104° F (0° - 40° C). - Relative Humidity: 5% - 85%, non-condensing. - Intended for indoor use only.
Certifications:	- FCC Class B - CE - IEC60950 - RoHS
Colors:	- White (FG1122-02-WH) - Black (FG1122-02-BL) - Light Almond (FG1122-02-LA)
Optional Accessories:	- Single Button Kit (FG5794-10) - Double Button Kit (FG5794-11) - Lutron Cairo Wallplates (available in a variety of sizes and colors)

Custom Button Installation

Overview

With the exception of the DAS-MET-NUM, all Metreau keypads feature field-replaceable pre-printed buttons. This section describes removing the original set of buttons and replacing them with custom buttons. FIG. 10 provides an exploded view of the keypad assembly.

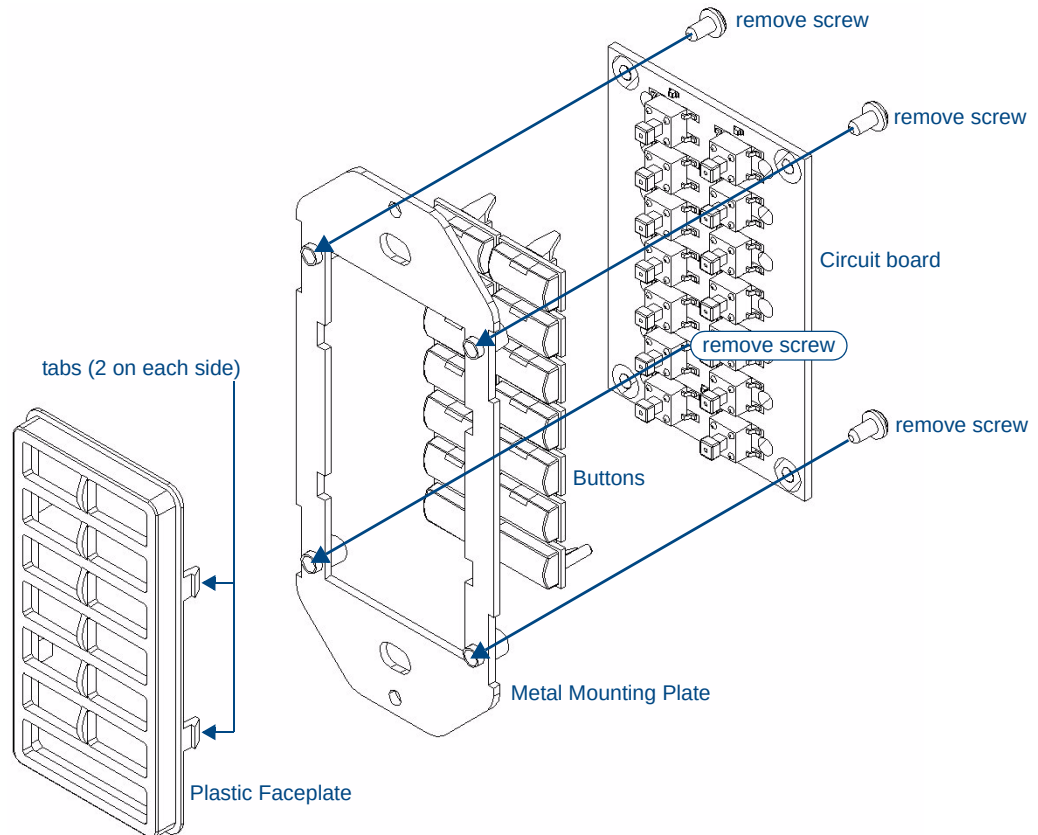


FIG. 1 Metreau keypads - Exploded view

Removing Buttons

The easiest way to remove and replace buttons on the Metreau keypads is to place the keypad assembly (FIG. 10) face-down on a flat level surface, so that the buttons stay in position until you are ready to remove them.



Disconnect the power supply and all wiring connections before removing/replacing buttons on the Metreau keypads.



Before touching the device, discharge the static electricity from your body by touching a grounded metal object.

The Faceplate is attached to the Mounting Plate via four plastic tabs (two on each side of the Faceplate, as shown in FIG. 10). It is not necessary to remove the plastic faceplate from the Mounting Plate in order to replace buttons.

1. On the back of the keypad assembly, remove the four screws that secure the Mounting Plate (with Faceplate attached) to the Circuit Board.
2. Carefully remove the Circuit Board from the Mounting Plate. Once the Circuit Board is removed from the Mounting Plate, the buttons are prone to fall out of position. In most cases, there is sufficient friction within the button mounts to hold them in place on the Circuit Board. However, take care at this point not to accidentally drop the buttons or any other part of the keypad assembly.
3. Gently lift each button off of their mounting posts on the Circuit Board.
4. Select the location of the custom buttons and gently snap them into place on the Circuit Board. Be sure to note the orientation of the LED window on each button, to avoid accidentally mounting them upside down.
5. Carefully insert the Circuit Board (with new buttons mounted) to the Mounting Plate. Take care to align the buttons properly with their respective holes in the Faceplate.
6. Replace and secure the four screws on the back of the Circuit Board. (FIG. 11).

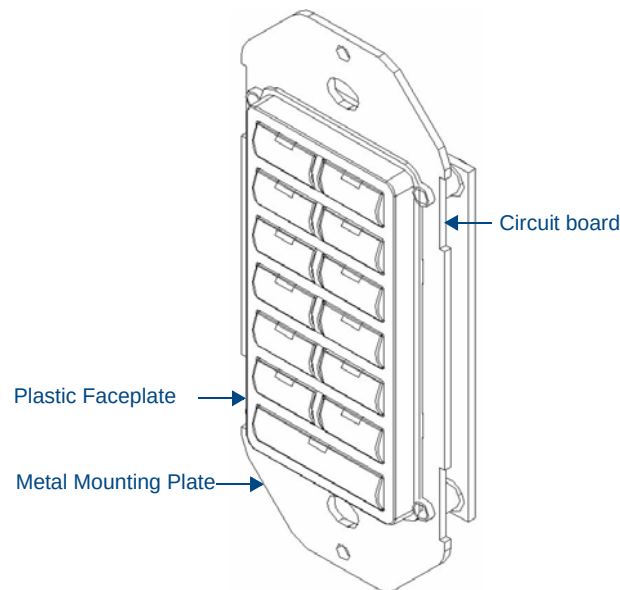


FIG. 2 Keypad assembly

Button Kits

Three different button kits are available for Metreau keypads, to accommodate most installations:

Audio

SIRIUS, XM, IPOD, MP3, CD2, AUX2, DVD2, PC, FM.

Residential

LIGHTS, FAN, SHADES, HVAC+, HVAC -, UP, DOWN, TV.

Commercial

DISP, PROJ, VC, AC, HVAC, LIGHTS, SCREEN.

Custom Keypads and Buttons

If a requested keypad needs functions not offered in the standard Button Kits, a custom keypad may be built with the AMX Metreau Keypad Preview (FIG. 12), available at www.amx.com. This tool allows custom arrangement of default or custom button arrangements, creation of custom button text, previews of keypad type and color, and printouts of final keypad layouts and parts lists.



FIG. 3 Metreau Keypad Preview

AxLink Device Addressing

Overview

Metreau Keypads used in NetLinx applications require a unique numeric AxLink device address of 1-255. Consider specifying the device address for each keypad before final installation.



AxLink device addressing applies only to the MET-6SRC, MET-7 and MET-13 keypads. Metreau Audio Keypads (DAS-MET-6SRC and DAS-MET-13) do not require device addressing.

Device Addressing on MET-6N Keypads

- The MET-6N uses two AxLink device addresses - one for the Keypad itself, and a second one for the IR Receiver.
- The device address of the IR Receiver is auto-assigned to be one number higher than the device address of the Keypad itself (to which the firmware is uploaded).
- The MET-6N will appear as two devices in the *Devices* frame, because its built-in IR Receiver is recognized as a separate online device.
- Firmware is uploaded to the device address of the Keypad (not the IR Receiver).

For example, if the MET-6N is set to device address 127, then the IR Receiver on that MET-6N will appear as device number 128. Firmware must be sent to the keypad, not the IR Receiver (in this example, device 127).

Setting The AxLink Device Address

AxLink-enabled Metreau keypads (MET-6N, MET-7 and MET-13) use an 8-position mini-DIP switch to specify a unique device address for each keypad in a NetLinx Control System (see FIG. 13).

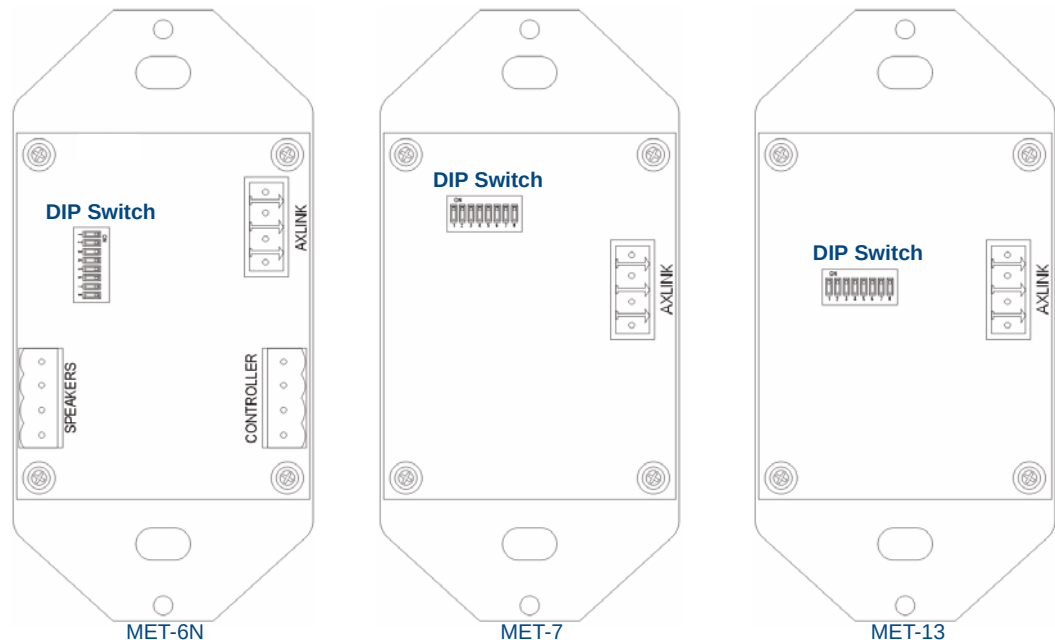


FIG. 1 DIP Switch and SWT Jumper locations



Before touching the device, discharge the static electricity from your body by touching a grounded metal object.

1. If connected, disconnect the power supply.
2. Locate the 8-position mini-DIP switch on the rear panel.
3. Set the DIP switch according to the values shown below.

Switch	1	2	3	4	5	6	7	8
Value	1	2	4	8	16	32	64	128

The device number is set by the total value of DIP switch positions that are in the ON position. Note that the ON position is indicated on the DIP Switch.

As an example, the DIP switch in FIG. 14 defines AXlink device number 129 ($1+128=129$).



FIG. 2 8-position mini-DIP Switch

If you later change the device number, remove and reconnect the power connector to enter the new device number into memory.



NOTE

AMX has created the "Dip Switch2" software application to assist in calculating dip switch position values. Download the (free) program Dip Switch2 from www.amx.com.

Mounting and Installation

Overview

Metreau keypads are designed to install into standard U.S. decora-style wall plates and boxes (wallboxes not included).



Before touching the device, discharge the static electricity from your body by touching a grounded metal object.

Mounting Dimensions

MET-6N, DAS-MET-6SRC

FIG. 15 provides detailed dimensions for the MET-6N and DAS-MET-6SRC keypads.

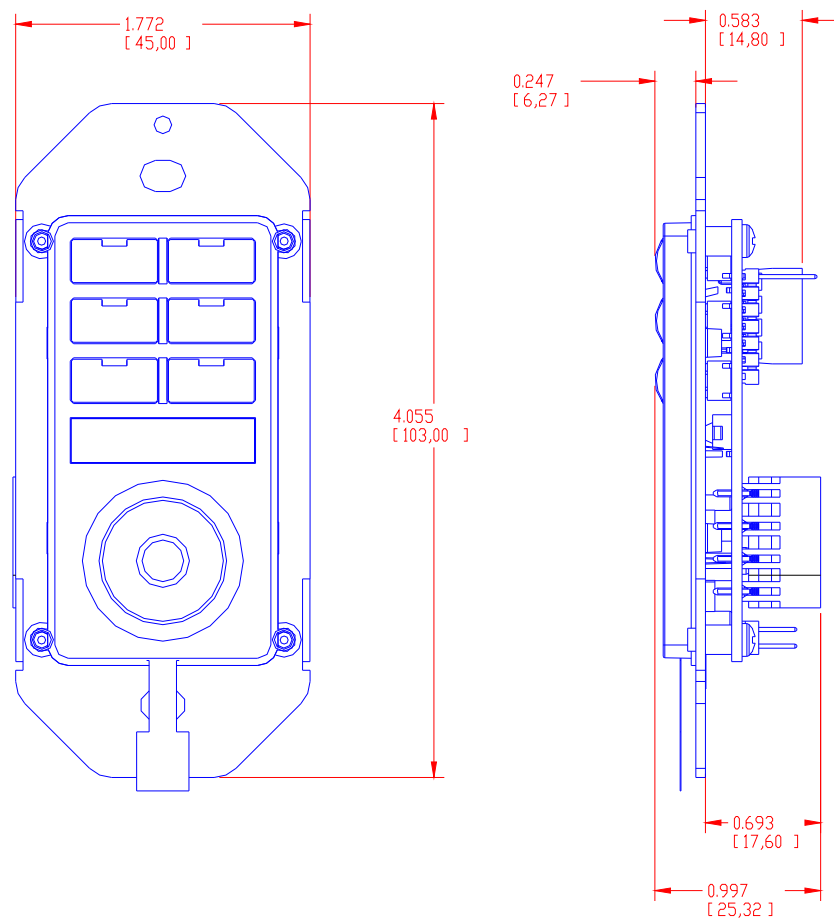


FIG. 1 MET-6N and DAS-MET-6SRC Mounting Dimensions

MET-7

FIG. 16 provides detailed dimensions for the MET-7 keypads.

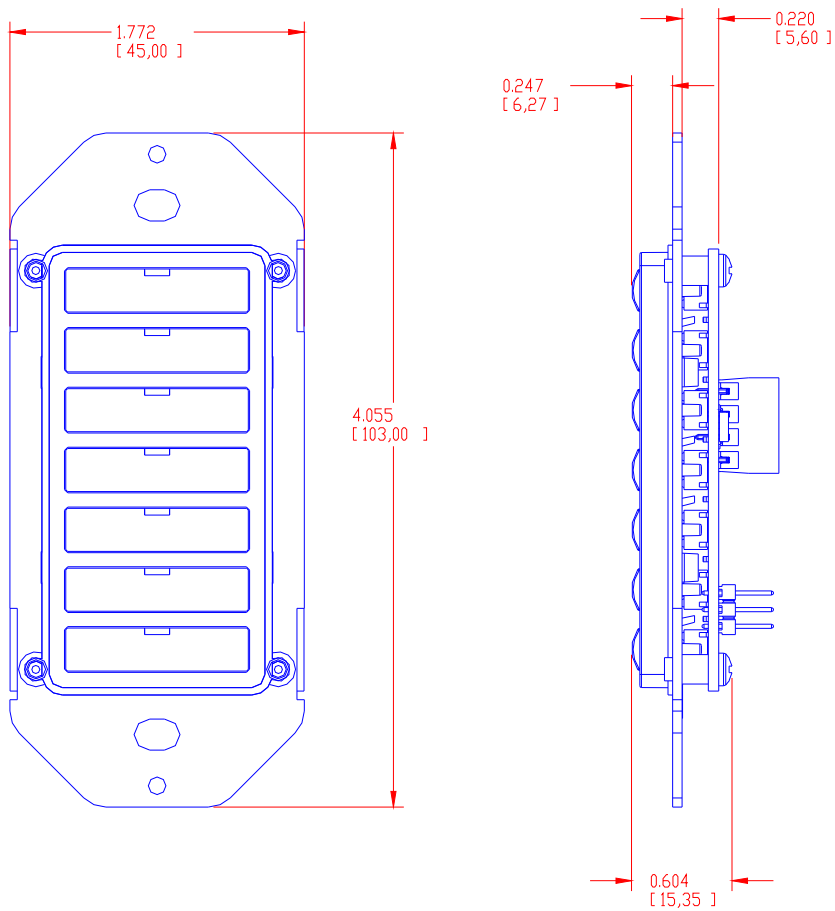


FIG. 2 MET-7 Mounting Dimensions

MET-13, DAS-MET-NUM

FIG. 17 provides detailed dimensions for the MET-13 and DAS-MET-NUM keypads.

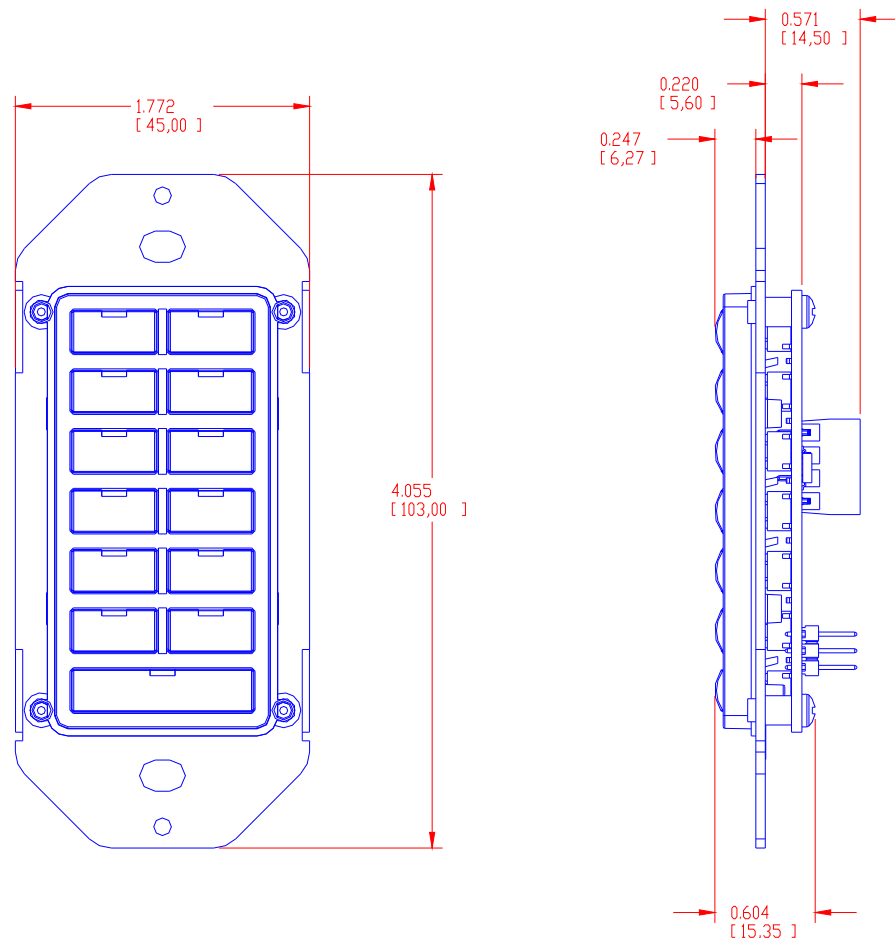


FIG. 3 MET-13 and DAS-MET-NUM Mounting Dimensions

Mounting Procedures

AMX recommends mounting Metreau keypads in standard U.S.-style decora wallboxes:

- Conduit box should meet NEC specs (section 370)
- Minimum internal clearance of (HWD) 2-5/8" x 1-3/4" x 1-5/8".

Wallbox Mounting

1. Use the cutout dimension for the wallbox to cutout the install surface.
2. Connect the AxLink connector (or SWT cable connectors) to the rear of the keypad.
3. Place the Mounting Plate on the wallbox; align the screw holes with the mounting holes and fasten the Mounting Plate to the wallbox using the screws supplied.



Do not overtighten the screws when mounting the Mounting Frame. The device should be flush with mounting surface.

Podium Mounting

1. Use the cutout dimension for the wallbox to cutout the Mounting Frame install surface for the keypad
2. Confirm that the terminal end of the AxLink cable is disconnected, and not receiving power.
3. Connect the AxLink power supply. The connector passes through the center of the Mounting Frame and connects to the board.
4. With the Mounting Frame resting in the cutout area, drill the mounting holes into the flat surface.



Do not overtighten the screws when mounting the Mounting Frame. The device should be flush with mounting surface.

Accent Frame

While the Metreau device family does fit into many International wallboxes, it may be necessary to utilize the optional Accent Frame to completely cover the wallbox.

To install the keypad with the optional Accent Frame:

1. Use the cutout dimension for the wallbox to cut out the install surface for the keypad.
2. Place the Accent Frame on the wallbox; align the screw holes with the mounting holes on the wallplate. Fasten the wallplate to the wallbox.

Based on the extensive number of international wallboxes it is not pragmatic to ship every possible screw that could be used. Please use the screws appropriate for your specific wallbox.



Do not overtighten the screws when mounting the Mounting Frame. The device should be flush with mounting surface.

3. Confirm that the terminal end of the AxLink cable is disconnected, and not receiving power.
4. Connect the power supply. The connector passes through the center of the Mounting Frame and connects to the board.
5. Place the Mounting Frame on the Accent Frame; align the screw holes with the mounting holes and fasten the Mounting Frame to the wallplate. The Accent Frame is shipped with two #6-32 x .187 long flat head screws (80-131); these are used to attach the keypad to the accent frames.

Wiring and Connections

Overview

Metreau keypads support both AxLink and SWT wiring configurations. Each is described in the following sub-sections. For information on AxLink vs. SWT device addressing, refer to the *AxLink Device Addressing* section on page 13.



Before touching the device, discharge the static electricity from your body by touching a grounded metal object.

AxLink Wiring

In AxLink mode, Metreau keypads use a standard four-pin captive-wire AxLink connector for power and data.



*If using power from AxLink, disconnect the wiring from the control system before wiring the Metreau keypad.
Do not connect power to the keypads until the wiring is complete.*

MET-6SRC, MET-7 and MET-13 Rear Panel Components



Before touching the device, discharge the static electricity from your body by touching a grounded metal object.

FIG. 18 shows the basic rear components of the AxLink (MET-6N, MET-7 and MET-13) keypads:

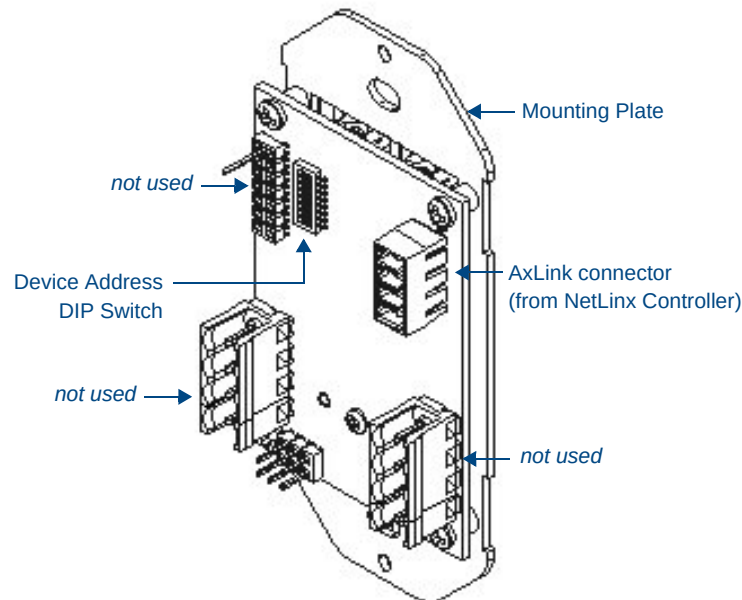


FIG. 1 MET-6SRC, MET-7 and MET-13 - Rear Components

AxLink Wiring Guidelines

Metreau keypads require 12 VDC power to operate properly. The necessary power is supplied via the AxLink cable. The maximum AxLink wiring distance is determined by power consumption, supplied voltage, and the wire gauge used for the cable. The following table lists wire sizes and the maximum lengths allowable based on the maximum power consumption rating of 170 mA.

Wiring Guidelines at 170 mA	
Wire Size	Maximum Wiring Length
18 AWG	690.42 feet (210.43 m)
20 AWG	436.80 feet (133.13 m)
22 AWG	272.33 feet (83.00 m)
24 AWG	171.66 feet (52.32 m)

The maximum wiring lengths for using AxLink power are based on a minimum of 13.5 volts available.

Preparing Captive Wires

You will need a wire stripper, and flat-blade screwdriver to prepare and connect the captive wires.

1. Strip 0.25 inch (6.35 mm) of wire insulation off all wires.
2. Insert each wire into the appropriate opening on the connector according to the wiring diagrams and connector types described in this section.
3. Turn the flat-head screws clockwise to secure the wires in the connector.



NOTE

Do not over-torque the screws; doing so can bend the seating pins and damage the connector.

AxLink Data and Power Connections

Connect the NetLink Controller's AxLink connector to the AxLink connector on the rear panel of the Metreau keypad for data and 12 VDC power as shown in FIG. 19.

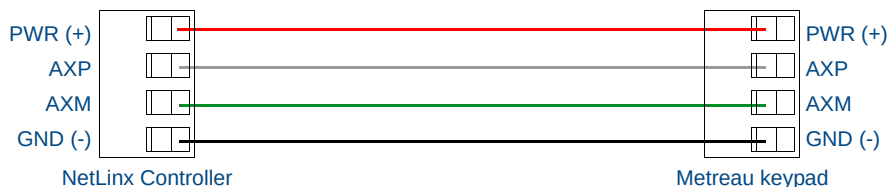


FIG. 2 AxLink straight-thru wiring

Using AxLink for Data with an Auxiliary Power Supply

Use an auxiliary 12 VDC power supply when the distance between the controller and server exceeds the limits described in the *AxLink Wiring Guidelines*. Connect only the GND (-) wire on the AxLink connector when using an auxiliary 12 VDC power supply.

Connect the NetLink Controller's AxLink connector to the AxLink connector on the rear panel of the Metreau keypad, as shown in FIG. 20.

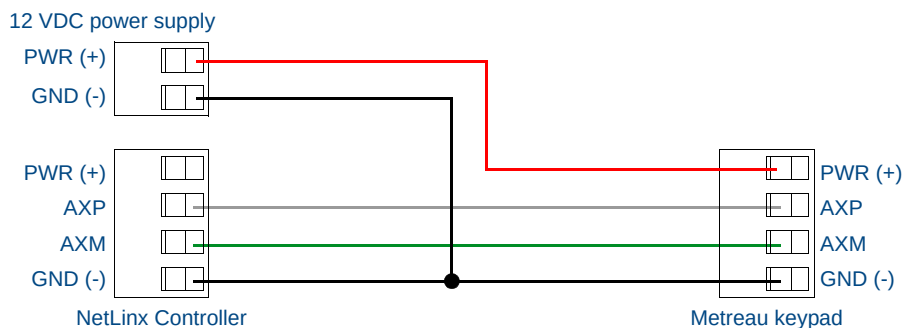


FIG. 3 AxLink and 12 VDC power supply wiring diagram



If you are not using power from AxLink, disconnect the wiring from the controller before wiring the Metreau keypad. Make sure the auxiliary power supply's PWR (+) is not connected to the controller's AxLink connector.

AxLink Status LED

The AxLink Status LED (located next to the AxLink connector), lights to indicate AxLink power/data status as follows:

AxLink LED Status

- | | |
|-----------------------|---|
| • 1 blink per second: | Indicates power is active and AxLink communication is working. |
| • Full On: | Indicates the following conditions: <ul style="list-style-type: none"> • There is no AxLink control or activity, but power is On. • The Axxess program is not loaded. |

If the LED is on and not flashing, disconnect the AxLink connector and recheck all AxLink connections. Then, reconnect the AxLink connector to the panel and verify the LED is flashing once per second.

SWT Wiring

DAS-MET-6SRC and DAS-MET-7 Rear Panel Components



Before touching the device, discharge the static electricity from your body by touching a grounded metal object.

FIG. 21 shows the basic rear components of the SWT (DAS-MET-6SRC and DAS-MET-NUM) keypads:

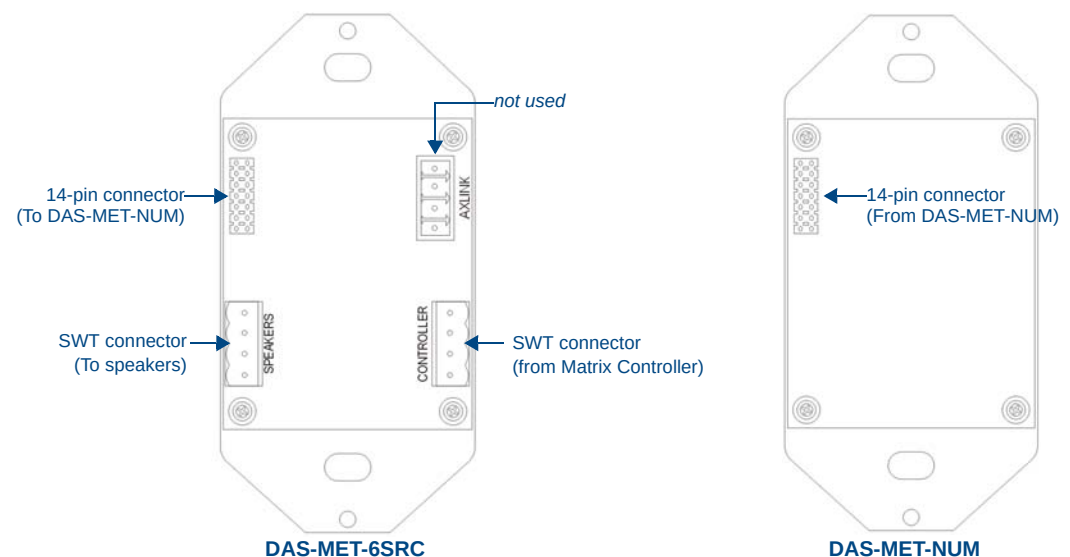


FIG. 4 DAS-MET-6SRC and DAS-MET-NUM - Rear Components

Cable Type

SWT wiring involves connecting the Mi-Series Controller, Metreau keypads, and speakers.

The Mi-Series Controller and Metreau keypads are cabled using standard four-conductor speaker cable originating at the Controller, passing through the keypad, and terminating at the speaker location.

AMX recommends using a bundled four-conductor 16-gauge stranded copper wire in a single continuous run.

Preparing Captive Wires

SWT wiring utilizes four-color "snap connectors" to secure the wires (no screws). You will need a wire stripper to prepare and connect the captive wires.

1. Strip 0.25 inch (6.35 mm) of wire insulation off all wires.
2. Insert each wire into the appropriate opening on the connector according to the wiring diagrams and connector types described in this section.

DAS-MET-6SRC - SWT Data and Power Connections

1. Connect the Matrix Controller's Zone Output connector to the four-pin connector on the rear panel of the Metreau keypad labeled TO CONTROLLER for data and 12 VDC power.
2. Connect the other four-pin connector on the keypad labeled TO SPEAKERS to the SWT speakers as shown in FIG. 19.

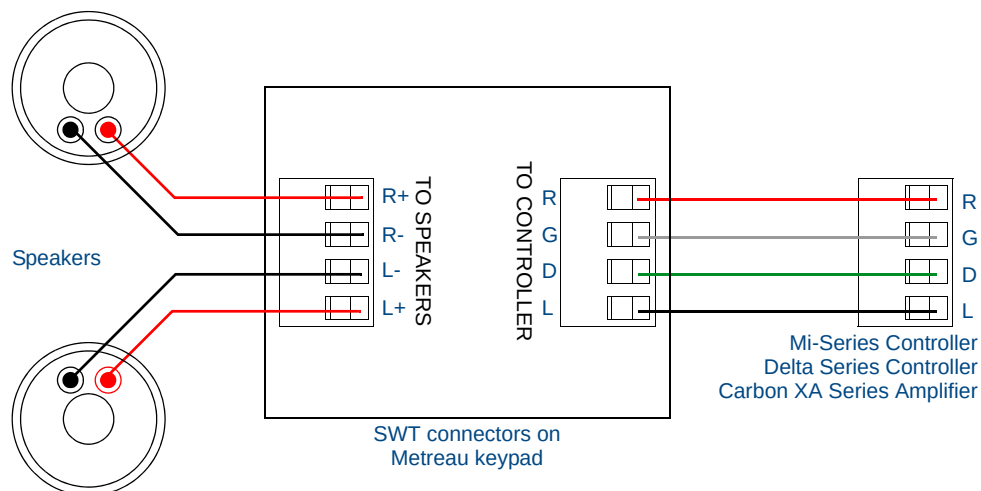


FIG. 5 SWT wiring

DAS-MET-NUM - Connecting to the Main DAS-MET-6SRC Keypad

The DAS-MET-NUM Metreau numeric keypad connects to the main DAS-MET-6SRC keypad via a 14-pin connector, as indicated in FIG. 23:

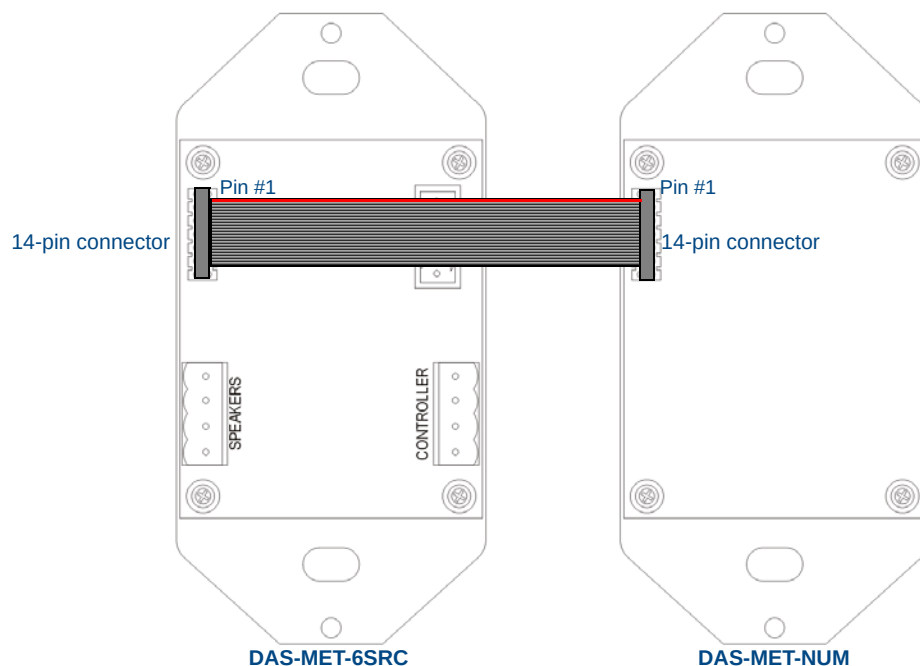


FIG. 6 DAS-MET-NUM connected to main DAS-MET-6SRC keypad

- The red line on the cable indicates Pin #1.
- The cable cannot be twisted, it must be straight across (Pin #1 to Pin #1).

Tango System Integration Drawings

Tango System Integration Drawing - Using Four-Conductor Speaker Wire

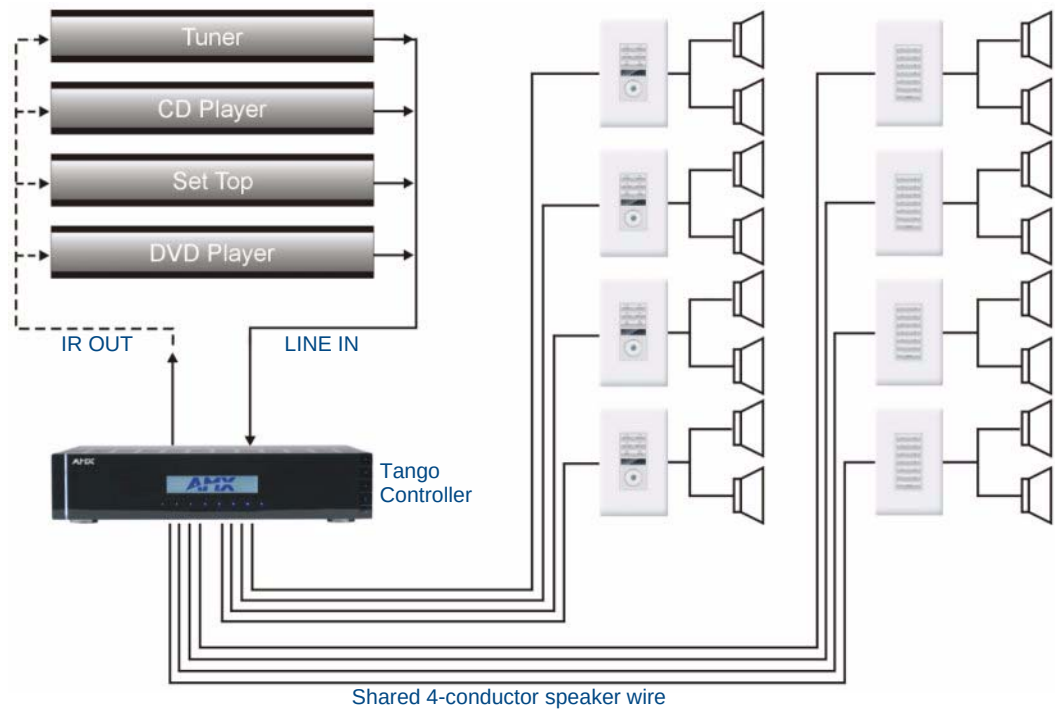


FIG. 7 System Integration Drawing Using Four-Conductor Speaker Wire

Tango System Integration Drawing - Using the Audio Zone Expander

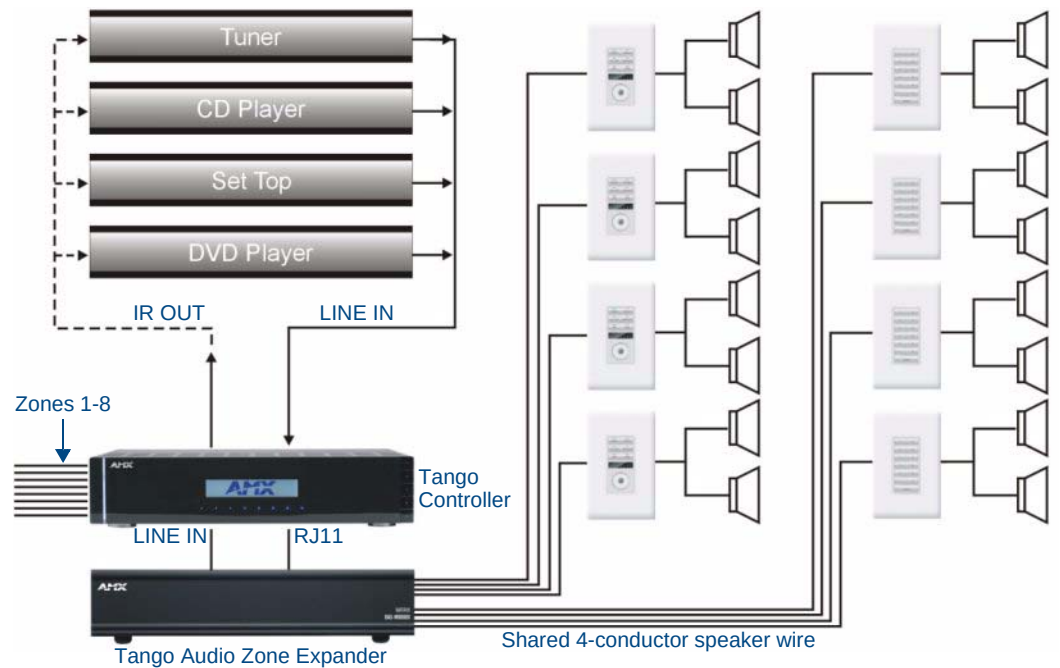


FIG. 8 System Integration Drawing Using the Audio Zone Expander

SWT Special Wiring Configurations

Auxiliary Amplifier Configuration

In some cases you may require more power for a given zone than the Matrix Controller can provide. You may purchase a DAS-LLC to provide a line level output to incorporate a larger external amplifier, or you can make your own line level converter.

FIG. 26 shows the construction of a simple circuit of discrete components to reduce the "speaker level" output of the Matrix Controller to "line level" so that it can drive an auxiliary amplifier.

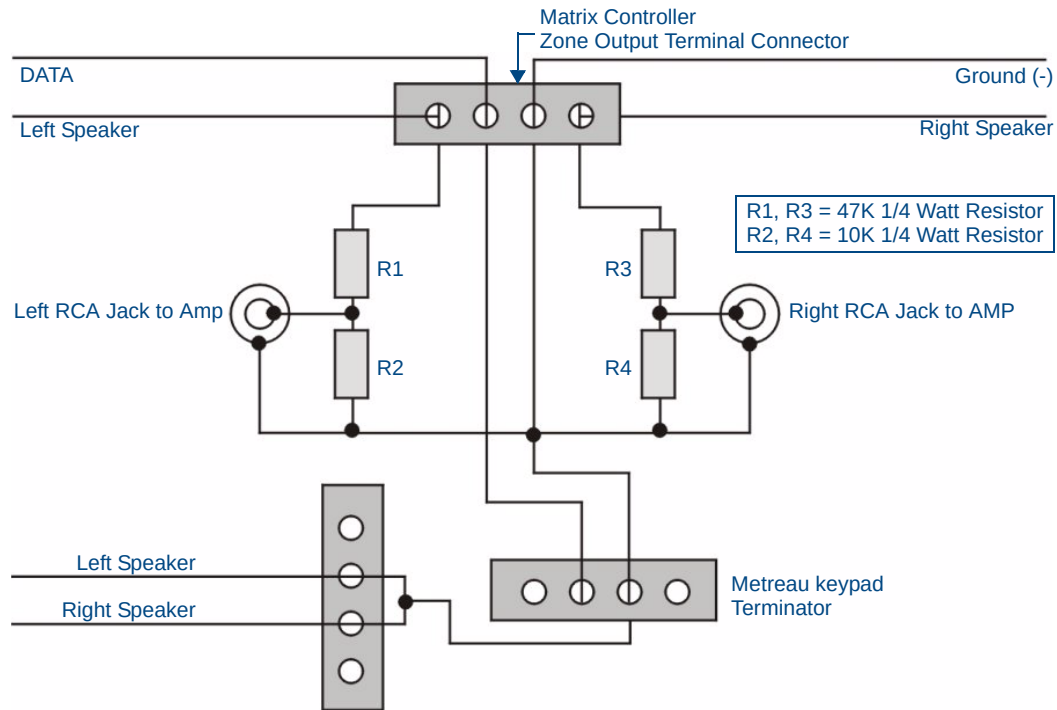


FIG. 9 Auxiliary Amplifier Configuration

This amplifier would typically be installed at the equipment rack (head end).

Remote Amplifier Configuration

In some cases, where the distance between the Matrix Controller and the zone is unusually long, it is sometimes desirable to have a remote amplifier at the zone end. You may install a DAS-LLC to accomplish this task or you may build your own. FIG. 27 shows the construction of a simple circuit of discrete components to reduce the Matrix Controller output to "line-level" so that it can be fed into an auxiliary amplifier.

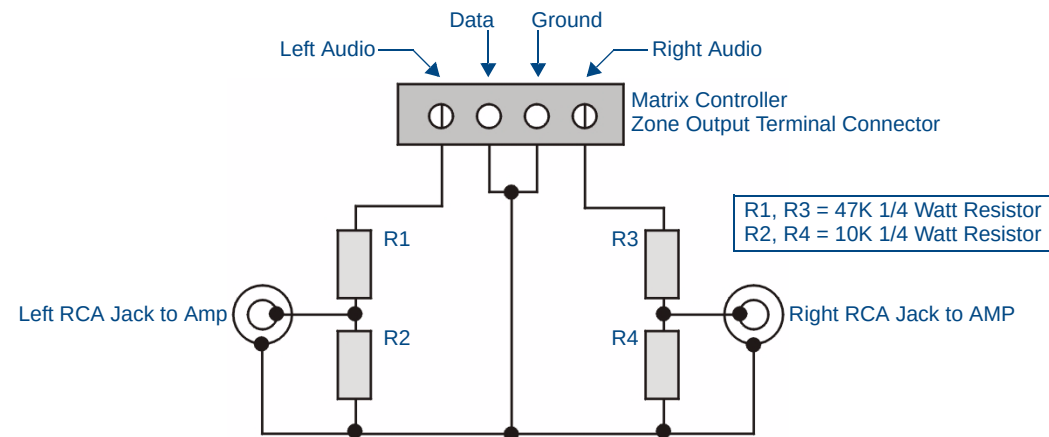


FIG. 10 Remote Amplifier Configuration

Two-Wire Configurations – Keypad for Control Only

In some retrofit configurations it is not feasible or possible to re-route the speaker cable through the keypad. In cases such as this, it is possible to run a separate cable pair (CAT-3 / CAT-5 / Twisted Pair) cable from the Matrix Controller to the keypad for control purposes.

When using CAT3/CAT5 over long runs, it is recommended to "double-up" the control wires (only 2 conductors are required, and there are 4-8 wires available).

FIG. 28 shows the connections of the control signal path to the keypad, and the speaker connections to the Matrix Controller.

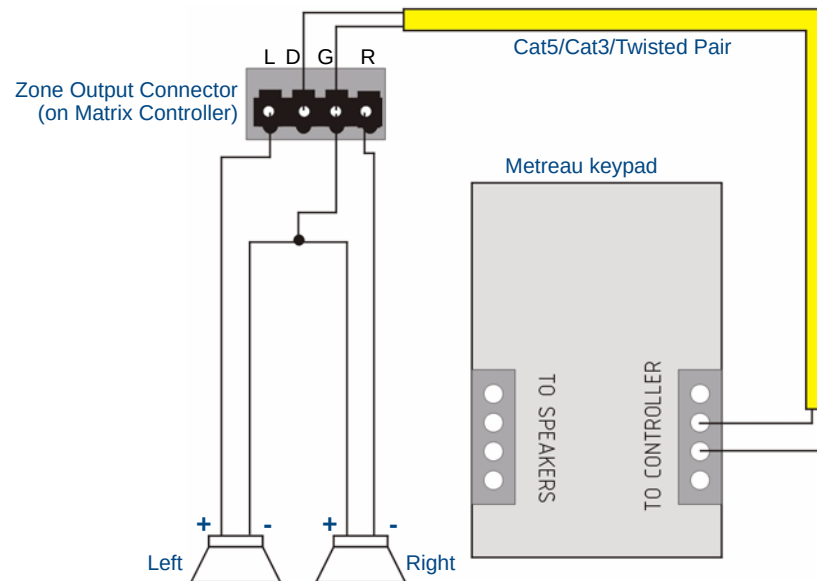


FIG. 11 2 Wire Configurations - keypad for Control Only

Split Zone / Analog Volume Control

In cases of split zones where more than one set of speakers are driven from the same keypad, it is sometimes desirable to place a volume control in the split zone. FIG. 29 shows the connections to a remote zone, and “Autoformer” volume control device.

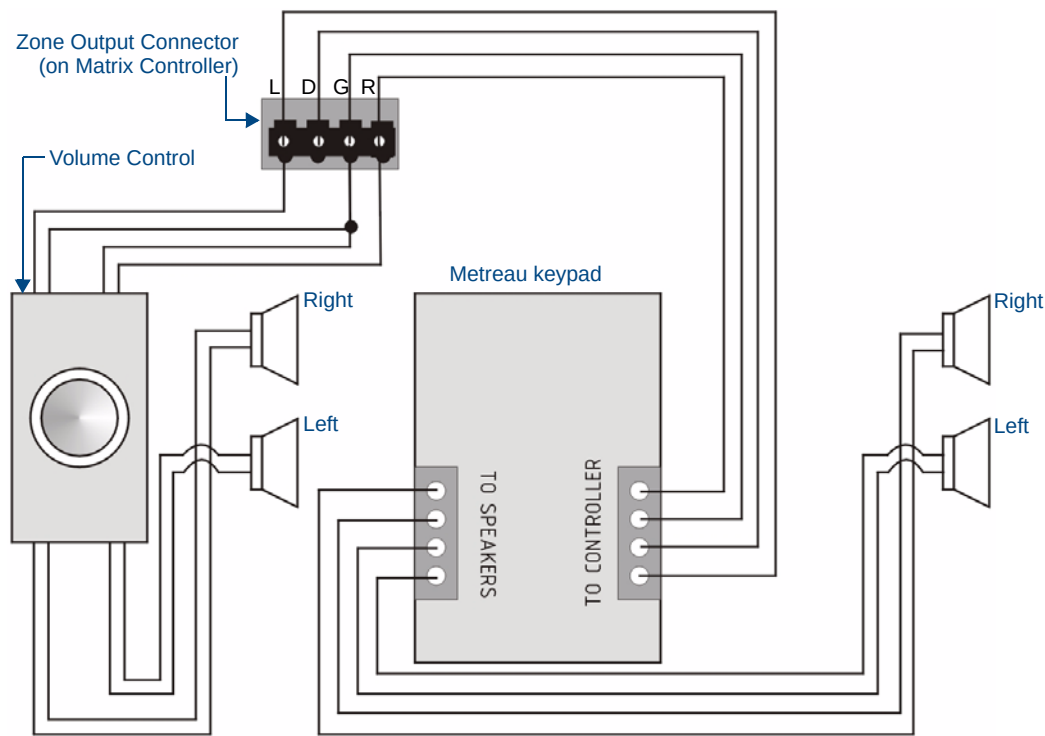


FIG. 12 Split Zone / Analog Volume control (Option 2) one keypad

Ensure the impedance setting doesn't fall below 4 Ohms.

- If you are installing 2 pairs of speakers in a zone and the speakers are 8 Ohms, it is not necessary to use an impedance matching autoformer type volume control. A standard stereo volume control will perform properly. The impedance will be approximately 4 Ohms.
- If you are using an impedance matching volume control with 2 pairs of speakers set the impedance matching to the 2X setting.



It is not recommended to install more than 2 pair of speakers per zone.

Programming The Metreau Keypads

Programming the AxLink Metreau Keypads

Button Layouts

The following illustrations indicate the button numbers for each of the AxLink Metreau Keypads (MET-6N, MET-7 and MET-13):

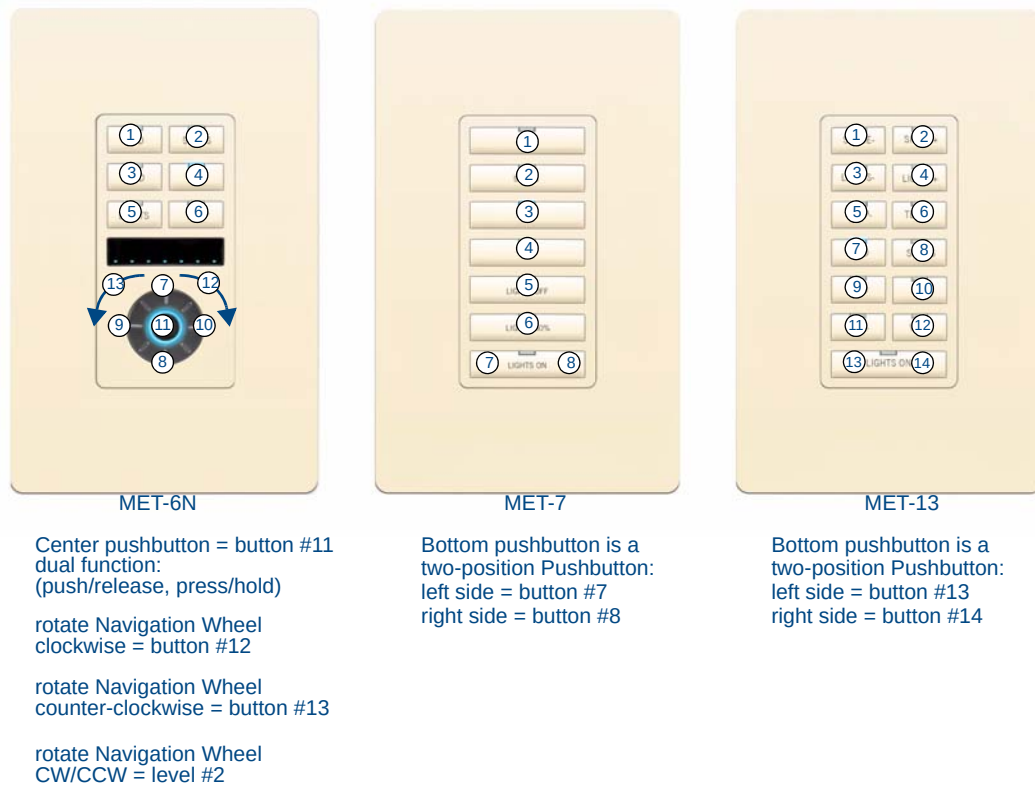


FIG. 1 Button Layout - MET-6N, MET-7 and MET-13

Programming the Navigation Wheel (MET-6N)

The Navigation Wheel has multiple programming functions. The device has four buttons mounted underneath the wheel, assigned as top, bottom, left, right, and center. These buttons are fully programmable. The wheel itself is also fully programmable.

The Navigation Wheel on the MET-6N can be treated from a NetLinX programming perspective as 5 distinct pushbuttons plus Channel up and down. The button layout for the Navigation Wheel is indicated below (FIG. 31).

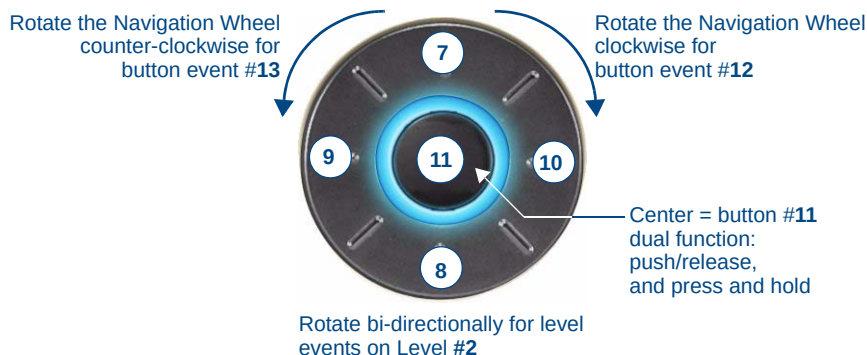


FIG. 2 Navigation Wheel - button layout

Navigation Wheel - Buttons 7-11

The top, bottom, left, right and center points on the Navigation Wheel are pushbuttons that provide events on Channels #7, #8, #9, #10 and #11, and can be programmed like any other AxLink button.

Navigation Wheel - Buttons 12-13

The Navigation Wheel itself can be rotated clockwise and counterclockwise, and is intended to provide level control (for example volume or lighting levels).

- When rotated clockwise, the Navigation Wheel provides events on Channel #12.
- When rotated counter-clockwise, the Navigation Wheel provides events on Channel #13.
- When rotated (clockwise/counter-clockwise), the Navigation wheel provides level events on Level #2.

Navigation Wheel - Level Control

In addition to generating button events, a rotation of the wheel causes a level change on Level #2:

- Clockwise rotations increase the level
- Counter-clockwise rotations decrease the level.

Example code is provided below:

```
LEVEL_EVENT[dvMetreau,2]
{
    volume = level.value
    SEND_STRING 0, "'Volume is now: ', atoi(volume)"
}
```

Display Bargraph

The display bargraph consists of 7 LEDs and is controlled via Level #1. Sending a level will update the LEDs on the display bargraph.

Example code is provided below:

```
SEND_LEVEL dvMetreau,1,200
```

Supported SEND_LEVELs

MET-6N keypads support a SEND_LEVEL on Level #1. This is used to adjust the LED bargraph display on the keypad.

SEND_LEVELs	
SEND_LEVEL	Adjusts the LED bargraph display on the keypad. Syntax: <pre>SEND_LEVEL <device address>,1,<level></pre> Variables: • level = LED bargraph display (range = 0 - 255).

Supported SEND_COMMANDs

The AxLink-enabled Metreau keypads (MET-6N, MET-7 and MET-13) support a number of NetLinX SEND_COMMANDs, described in the following section. To use these commands, establish a Telnet session from the PC to the NetLinX master.



All text is based on a Unicode index.

SEND_COMMANDs	
@BRT	Set Brightness level for all LEDs (pushbuttons and levels indicator bar), for both On and Off states. Syntax: <pre>@BRT-<on brightness (0-32)>,<off brightness (0-32)></pre> Variables: • on brightness = LED On brightness and can range from 0 (off) to 32 (max). • off brightness = LED Off level brightness and can range from 0 (off) to 32 (max). Example: <pre>SEND_COMMAND keypad, '@BRT-32,0'</pre> Sets the LEDs to max brightness in the On state (32), and minimum brightness (no illumination) in the Off state (0).
@WBRT	Set Brightness level for Navigation Wheel LED, for both On and Off states. Syntax: <pre>'@WBRT-<on brightness (0-32)>,<off brightness (0-32)>'</pre> Variables: • on brightness = Scroll Wheel LED on brightness and can range from 0 (off) to 32 (max) • off brightness = Scroll Wheel LED off brightness and can range from 0 (off) to 32 (max) Example: <pre>SEND_COMMAND keypad, '@WBRT-32,0'</pre> Sets the Navigation Wheel LED to max brightness in the On state (32), and minimum brightness (no illumination) in the Off state (0).
BMODE	Sets the bargraph mode: Syntax: <pre>'BMODE-<bargraph mode 0-9>'</pre> Sets the specified bargraph to operate in one of the following modes: 0 = (default) normal bar mode 1 = normal dot mode (only one peak LED on at a time) 2 = special bar mode (a level of 1-32 still has first LED on) 3 = special dot mode (a level of 1-32 still has first LED on) 4 = inverse normal bar mode 5 = inverse normal dot mode 6 = inverse special bar mode 7 = inverse special dot mode 8 = individual element, discrete mode 9 = inverse individual element, discrete mode Example: <pre>SEND_COMMAND keypad, 'BMODE-0'</pre> Sets the bargraph mode to default mode.

LED Feedback for 2-Position Pushbuttons

The MET-7 and MET-13 Keypads feature a 2-Position pushbutton at the bottom of the button layout (FIG. 32). It can be used either as a single button (in which case it functions just like the other buttons), or it can be used as a 2-position button. In many cases, this button is used as a 2-Position button to provide ramp up/down control, for volume, light levels, etc.

- On the MET-7, the 2-Position button utilizes button numbers **7** (*left-side*) and **8** (*right-side*).
- On the MET-13, the 2-Position button utilizes button numbers **13** (*left-side*) and **14** (*right-side*).

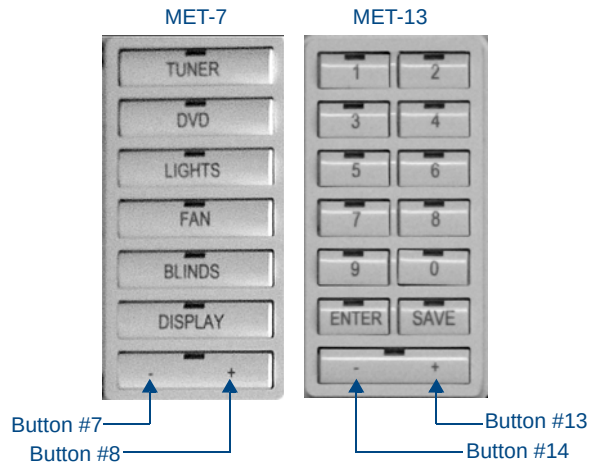


FIG. 3 MET-7 and MET-13 with 2-Position Button

Only the left button provides LED feedback.

In order to achieve LED feedback on the right button, feedback must be toggled on the left button

Sending Firmware to Metreau Keypads (AxLink)

The Firmware on the AxLink-enabled Metreau keypads (MET-6N, MET-7 and MET-13) can be updated via the NetLinX Studio2 application.

Device Addressing on MET-6N Keypads

- The MET-6N uses two AxLink devices addresses - one for the Keypad itself, and a second one for the IR Receiver.
- The device address of the IR Receiver is auto-assigned to be one number higher than the device address of the Keypad itself (to which the firmware is uploaded).
- The MET-6N will appear as two devices in the *Devices* frame, because it's built-in IR Receiver is recognized as a separate online device.
- Firmware is uploaded to the device address of the Keypad (not the IR Receiver).

For example, if the MET-6N is set to device address 127, then the IR Receiver on that MET-6N will appear as device number 128. Firmware must be sent to the keypad, not the IR Receiver (in this example, device 127).



Refer to the NetLinX Studio 2 online help for additional details on firmware transfers. NetLinX Studio 2 is available for free download from www.amx.com.

1. Open NetLinX Studio2.
2. Go to **Tools > Firmware Transfers > Send to Axxess Device...** This opens the *Send to Axxess Dialog Window*.

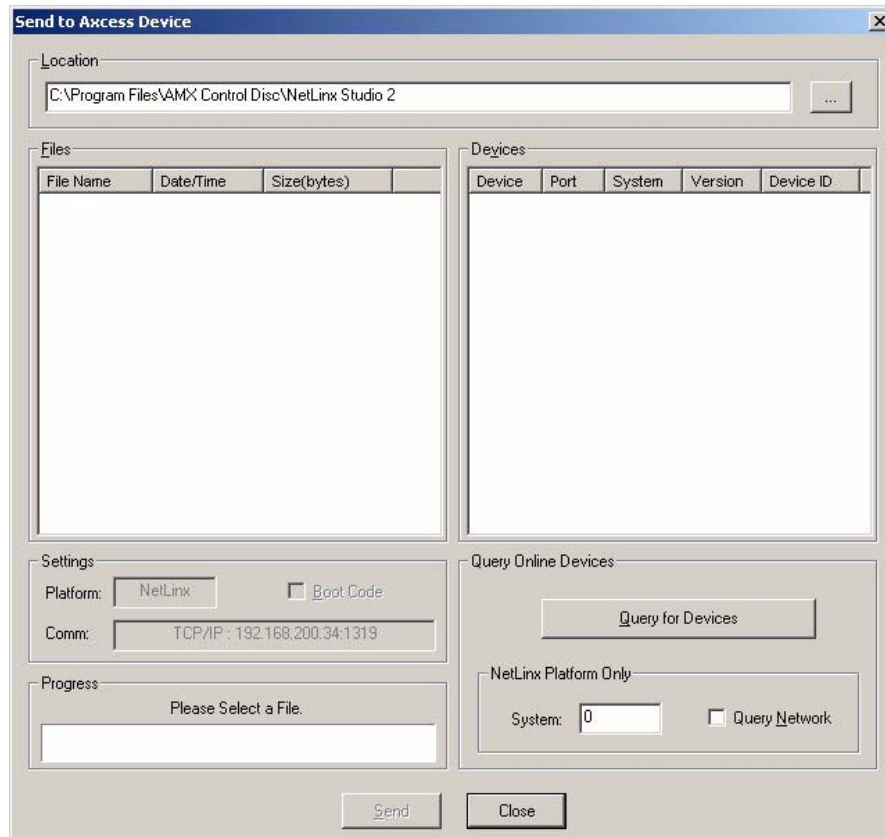


FIG. 4 Send to Access Dialog Window

3. Browse to the location of the firmware file.
4. Select the file within the *Files* frame.
5. Click **Query for Devices**.

6. Select the Metreau keypad within the *Devices* frame.

The MET-6N will appear as two devices in the *Devices* frame, because it's built-in IR Receiver, is recognized as a separate online device.

The Device Address of the IR Receiver is always one number higher than the device number of the keypad itself (to which the firmware is uploaded).

For example, if the MET-6N is set to device number 127, then the IR Receiver on that MET-6N will appear as device number 128. Firmware must be sent to the keypad, not the IR Receiver (in this example, device 127).

7. Click **Send** and then **Close**.
8. Upon confirmation of a successful send, you can exit NetLinx Studio2.

Programming the SWT Metreau Keypads

SWT-only Metreau keypads (DAS-MET-6SRC and DAS-MET-NUM) are configured via options that are accessible through the Tango Audio Controller.

Refer to the *Tango Audio Controller Operation / Reference Guide* (available from www.amx.com) for details.

Basic Keypad Functions - DAS-MET-6SRC

Overview

Metreau Keypads are pre-configured to provide many common functions. The DAS-MET-6SRC provides basic keypad functionality, including Source Control (selecting source, initiating and pausing playback), Volume control (Up/Down), Zone control (On/Off), and audio (Bass/Treble/Balance/SRS Mode) adjustment.



The SWT Metreau Keypads function essentially the same as previous versions SWT keypads.

The standard configuration for the Audio (SWT) 6-Source Keypad (DAS-MET-6SRC) is described below. Note that while the functionality described here is fixed for the SWT Keypads, the AxLink Keypads can be customized, just like any other AxLink keypad.

DAS-MET-6SRC - Listening To a CD or DVD

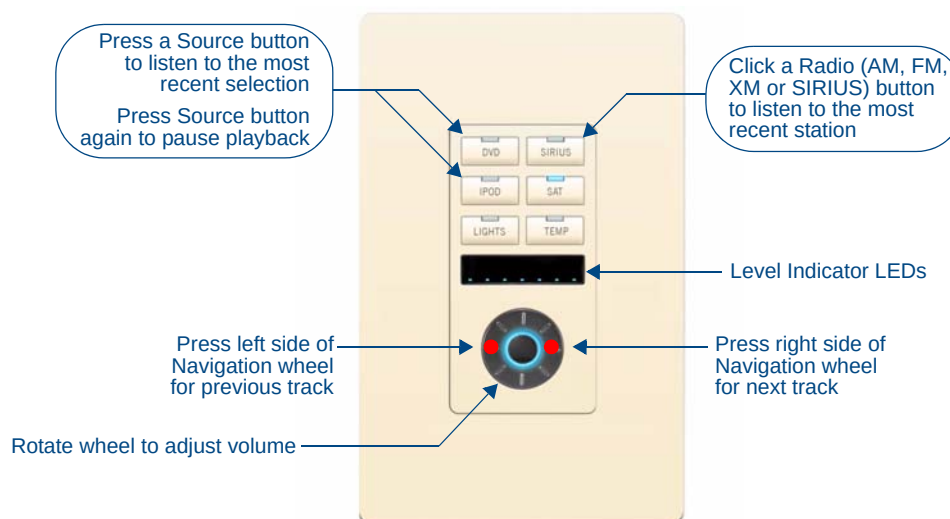


FIG. 1 Metreau Audio keypads

Selecting The Source for Playback

Press the source button (i.e. "CD" or "DVD") on the room/zone keypad to listen to the most recent selection.

- If the Source is off the system will turn it on.
- If the Source is stopped the system will initiate Play.
- If the Source has been paused or muted, the system will un-pause / un-mute it.

Changing Tracks

- Press the left and right sides of the Navigation Wheel to change tracks.
- Press the button in the center of the Navigation Wheel to select a track and initiate playback.

Pausing Playback

To Pause playback, press the button of the source that is currently playing (indicated by an active LED).

- The CD/DVD is only paused if there are no other zones listening to that source. If no other zones are listening to that source it will be paused.
- If the source remains paused for greater than 10 minutes, the Controller will send a POWER OFF command to the source.

Listening To an iPod

Dock the iPod in the docking station connected to the Tango Audio Controller, and press the iPod button on the room/zone keypad to listen to the most recent selection.

The UP, DOWN, LEFT, RIGHT, Centre PRESS and Centre HOLD buttons are programmed by the installer, based on what the individual dock with remote can do. For example, UP/RIGHT could both be programmed to be *Next track*, DOWN/LEFT could both be programmed to be *Previous track*, and Centre could be programmed to be *Play/Pause*.

Listening To the Radio

- Press the **AM**, **FM**, **SIRIUS** or **XM** button on the room/zone keypad to listen to the most recent station.
- Select a new station by pressing a custom-programmed button.

The UP, DOWN, LEFT, RIGHT, Centre PRESS and Centre HOLD buttons are programmed by the installer, however, the standard configuration for the AM/FM Tuner, and for the SIRIUS/XM Tuner is as follows:

AM/FM Tuner on a 6-source keypad:

- UP/DOWN = Seek Up/Down
- LEFT/RIGHT = Prev/Next Preset
- Centre Press = Toggle AM/FM
- Centre Hold = Toggle Stereo/Mono

SIRIUS/XM Tuner on a 6-source keypad:

- UP/DOWN = Channel UP/DOWN
- LEFT/RIGHT = Category Next/Prev
- Centre = Select
- Centre Hold = Menu

On a Numeric keypad:

- Select a new station by pressing the station's call numbers on the DAS-MET-NUM Numeric keypad.

Adjusting Volume

The Navigation Wheel can be rotated bi-directionally, and provides volume level control.

- Clockwise rotation increases the volume level, counter-clockwise rotation decreases the volume level.
- When the volume is increased/decreased, the 7 LEDs on the KP will increase/decrease accordingly.
- Volume is changed based on angle rotation. Each quarter turn is approximately +/- 3db. The range for Volume is 0-70.

DAS-MET-6SRC - Audio Adjustment Mode

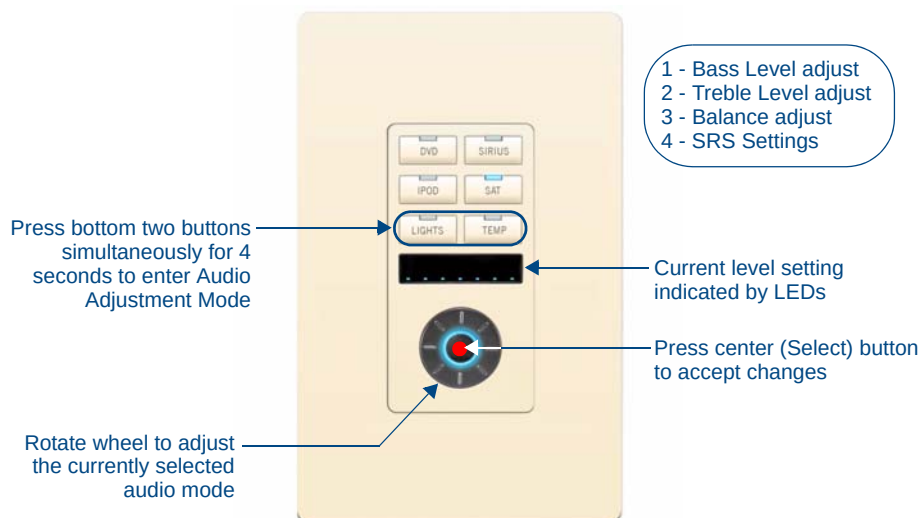


FIG. 2 DAS-MET-6SRC

On a 6-source keypad, press and hold the bottom two Source buttons simultaneously for four seconds to set or adjust Bass, Treble, Balance and SRS Mode settings in that room/zone.

Adjusting Bass Level For a Room/Zone

When the bottom two Source buttons are pressed simultaneously for four seconds, the first adjustment is for *Bass Level*:

- The **top-left** LED will blink to indicate that Bass Level Adjustment mode is active (FIG. 36).

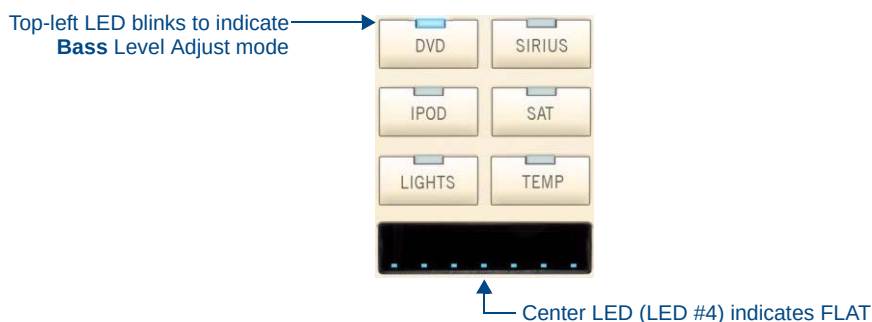


FIG. 3 Bass Level Adjust Mode

- Rotate the Navigation Wheel to adjust the bass level up (clockwise) or down (counter-clockwise).



Bass adjustments are provided in +/- 1dB steps, from -10dB (min) to +10dB (max).

- The bass level is indicated in the LED display: Flat = center LED (#4) lit.
- Press and hold the center (Select) pushbutton on the Navigation Wheel for 3 seconds to return to the default Bass Level setting.

Press the center (Select) pushbutton on the Navigation Wheel to set the current bass level, and proceed to *Treble Adjustment* mode.

Adjusting Treble Level For a Room/Zone

When the Bass Level is set (via the Select button - see above), the next adjustment is for *Treble Level*:

- The **top-right** LED will blink to indicate that Treble Adjustment mode is active (FIG. 37).
- Rotate the Navigation Wheel to adjust the treble level up (clockwise) or down (counter-clockwise).

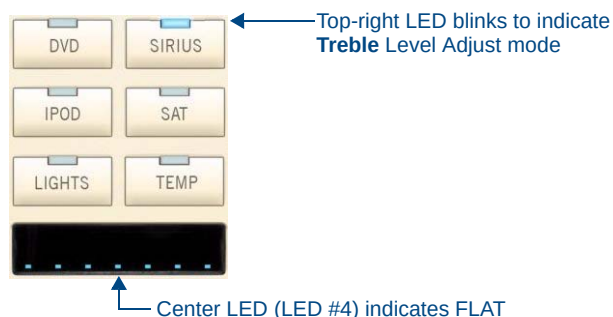


FIG. 4 Treble Level Adjust Mode



Treble adjustments are provided in +/- 1dB steps, from -10dB (min) to +10dB (max).

- The treble level is indicated in the LED display: Flat = center LED (#4) lit.
- Press and hold the center (Select) pushbutton on the Navigation Wheel for 3 seconds to return to the default Treble Level setting.

Press the center (Select) pushbutton on the Navigation Wheel to set the current treble level, and proceed to *Balance Adjustment* mode.

Adjusting Balance For a Room/Zone

When the Treble Level is set (via the Select button - see above), the next adjustment is for *Balance Adjust*:

- The **middle-row left** LED will blink to indicate that Balance Adjust mode is active (FIG. 38).

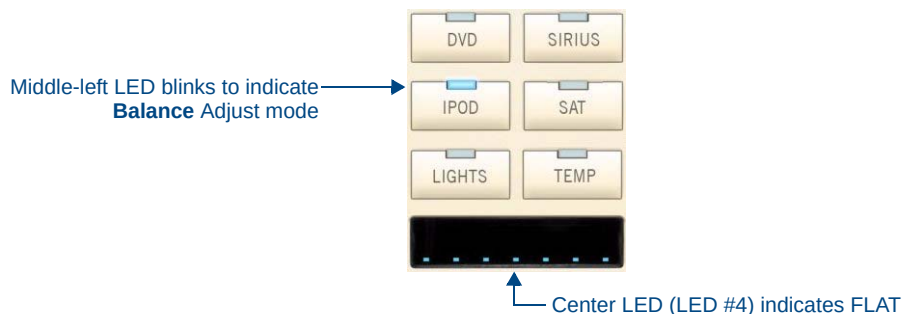


FIG. 5 Balance Adjust Mode

- Rotate the Navigation Wheel to adjust the balance right (clockwise) or left (counter-clockwise).
- The balance setting is indicated in the LED display: Flat = center LED (#4) lit.
- Press and hold the center (Select) pushbutton on the Navigation Wheel for 3 seconds to return to the default Balance setting.

Press the center (Select) pushbutton on the Navigation Wheel to set the current balance settings, and proceed to *SRS Adjustment* mode.

Adjusting SRS Settings For a Room/Zone

When the Balance setting is set (via the Select button - see above), the next adjustment is for *SRS Adjust*:

- The **second-row right** LED will blink to indicate that SRS Adjust mode is active (FIG. 39).
- Rotate the Navigation Wheel to select the desired SRS mode.

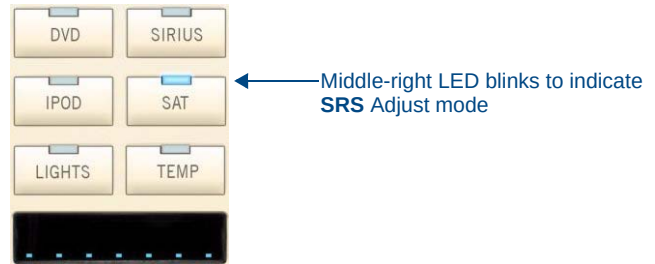


FIG. 6 SRS Adjust Mode

Press the center (Select) pushbutton on the Navigation Wheel to set the current SRS settings, and proceed to *LED "ON" Brightness Adjust* mode.

Turning SRS Off

Press and hold the Center Navigation button while in SRS mode.

DAS-MET-6SRC - Privacy Mode Off/On

When Privacy Mode is engaged, the room/zone cannot be paged, apart from this, the room/zone will function normally.

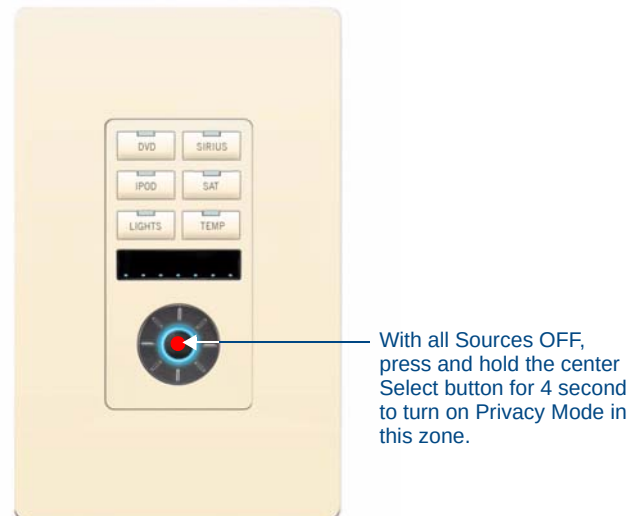


FIG. 7 Privacy Mode Off/On



NOTE

To use Privacy Mode in a specific zone, the keypad must be OFF (no sources selected).

To engage Privacy Mode, press and hold the **Select** button (the center pushbutton on the Navigation Wheel) for 4 seconds.

All Source buttons will glow & pulse at a low level to indicate Privacy mode is active.

Turning Privacy Mode Off

To disengage Privacy Mode, turn on the zone by pressing any one of the source buttons.

Working With Sources

When a Source button is selected, the following occurs:

The Source is turned ON, and if there is a Favorite assigned for the Source, then the favorite begins playing. If no Favorite has been set for the Source, the following occurs:

- If the Source is the on-board Tuner, the first Preset will begin playing. If there are no Presets, then the last station listened to will begin playing.
- If the Source is an external Tuner, the last station listened to will begin playing.
- If the Source is a CD player/changer, the first Track of the first CD will begin playing (unless the source has the ability to retain its previous settings).
- If the Source is Satellite, then the last station listened to will begin playing.



For information on assigning a Favorite to a Source, refer to the Creating a Favorite For a Specific Source section on page 49.

For information on assigning a Preset to a Tuner, refer to the Creating A Preset section on page 47.

DAS-MET-6SRC - Zone Control (On/Off)

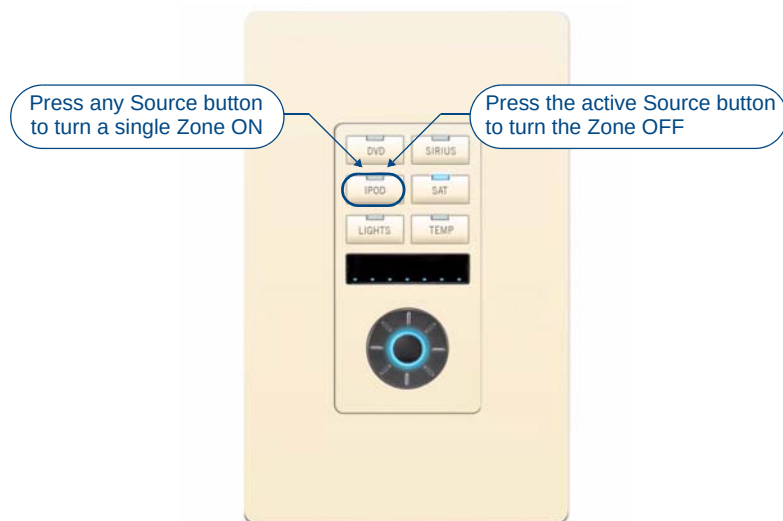


FIG. 8 Zone Control (On/Off)

Turning a Single Zone On/Off

- To turn a single Zone ON, press any Source Button.
- To turn a single Zone OFF, press the Active Source Button.

Turning On a Source In All Zones

Press and hold any Source Button for a duration of 4 seconds (the selected Source will play in all zones).

Turning Off/On a Source In All Zones

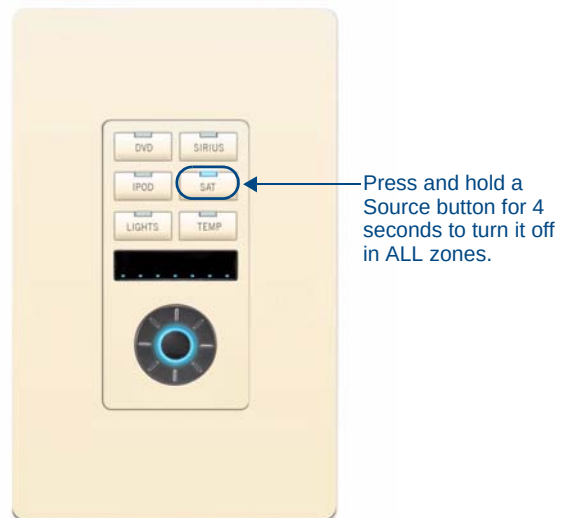


FIG. 9 Turning Off a Specific Source in All Zones

Press and hold the active Source button for 4 seconds to turn it off in all zones.

To turn the source back on in all zones, press and hold the same Source button for 4 seconds.

Turning Off All Zones (System OFF)

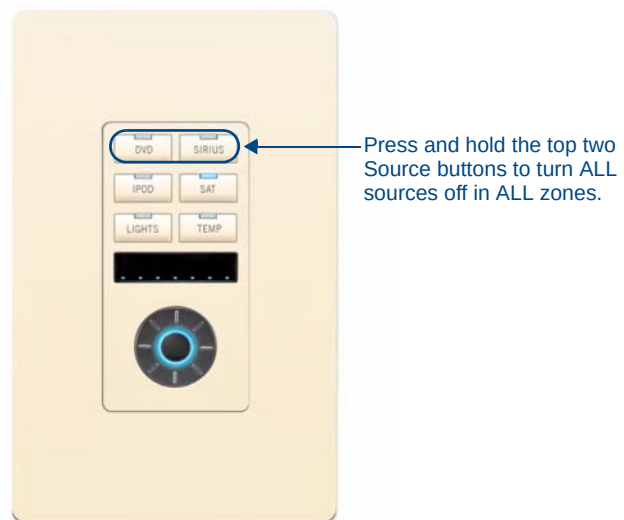


FIG. 10 Turning Off all Sources in All Zones

Press and hold the top two Source buttons simultaneously for 4 seconds.



All zones will be turned off, and no sources will play. One minute after an ALL OFF has been performed, all sources will power down and the Controller will Default to "Standby Mode".

DAS-MET-6SRC - Zone Control (Dynamic Pause)

Switching sources within a single zone, turning off an active source within a single zone, and switching sources for all (grouped) dynamically pauses the source device that is no longer being used.

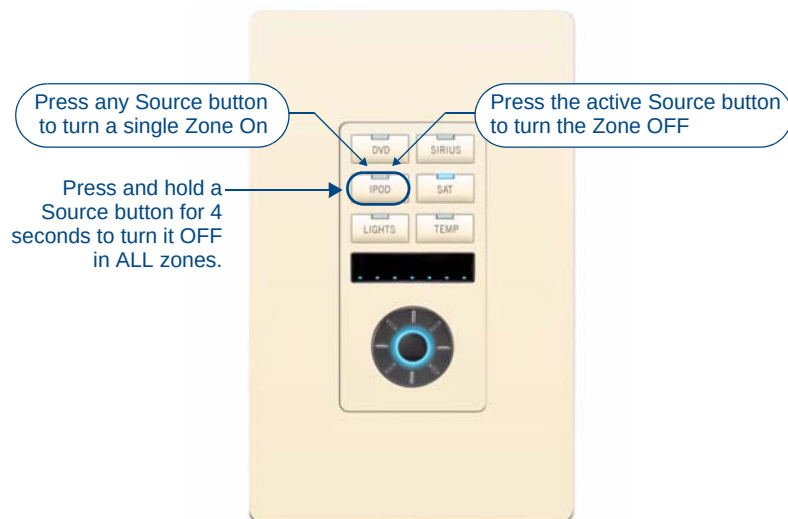


FIG. 11 Turning Off All Zones

Single Zone Listening To Source

Switching sources, or turning off the Source for a single Zone dynamically pauses the Source:

- With a single Zone listening to a Source, **switching to a different Source** dynamically pauses the original Source, and begins playing the newly selected Source.
- With a single Zone listening to a Source, **turning off the Source** dynamically pauses the Source.

Multiple Zones Listening To The Same Source

Switching Sources, or turning off the Source for one Zone **does not** dynamically pause the Source:

- With multiple Zones listening to the same Source, **switching to a different Source** from one of the Zones **does not** pause the original Source, and the original Source continues to play in all other Zones that are On.
- With multiple Zones listening to the same Source, **turning off the Source** for one zone **does not** dynamically pause Source, and the original Source continues to play in all other Zones that are On.

Single or Multiple Zones Listening To The Same Source

Grouping *all* Zones to another Source, dynamically pauses the Source:

- With single or multiple Zones listening to the same Source, grouping all Zones from another Zone using a different Source dynamically pauses the original Source.

DAS-MET-6SRC - Using the Navigation Wheel

The Navigation Wheel on the DAS-MET-6SRC provides multiple functions, based on the source type selected, as described in the following sections:

Using the Navigation Wheel With the Internal AM/FM Tuner

FIG. 45 describes the functions available at the Navigation Wheel, when using the internal AM/FM Tuner:

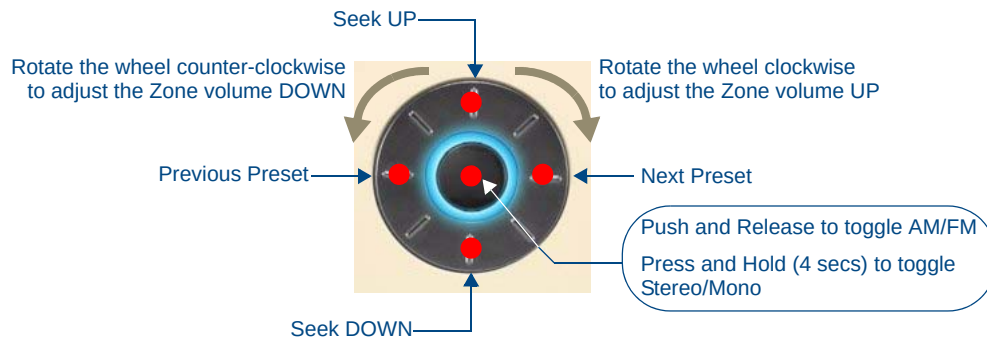


FIG. 12 Using the Navigation Wheel With The Internal AM/FM Tuner

Using the Navigation Wheel With the Internal SIRIUS Tuner

FIG. 46 describes the functions available at the Navigation Wheel, when using the internal SIRIUS Satellite Radio Tuner:

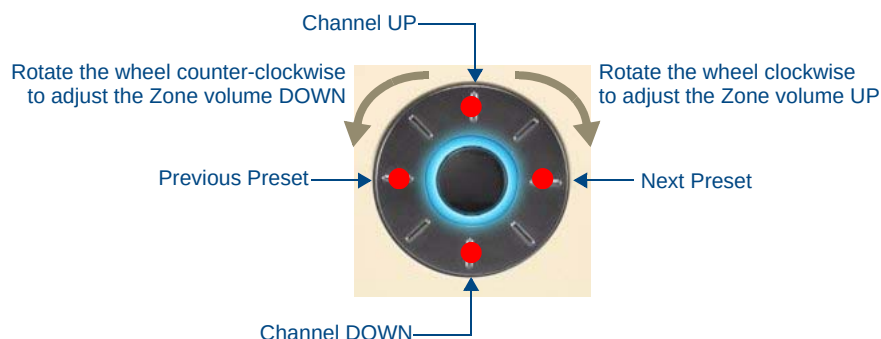


FIG. 13 Using the Navigation Wheel With The Internal SIRIUS Satellite Radio Tuner

Using the Navigation Wheel With a CD Player/Changer

FIG. 47 describes functions available at the Navigation Wheel, when used with a CD Player/Changer:

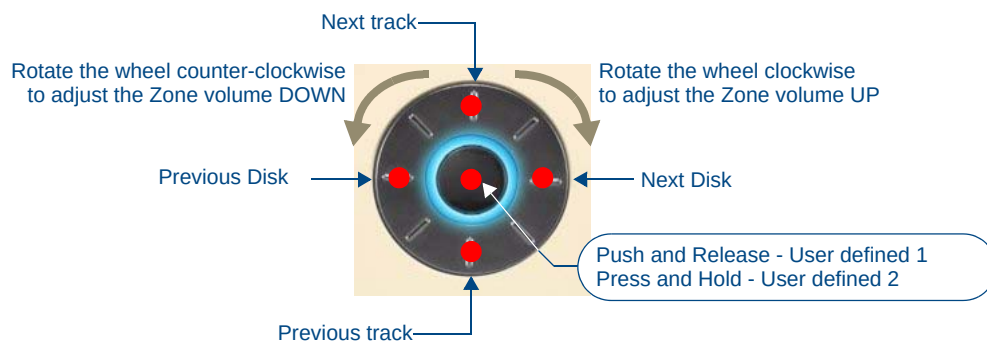


FIG. 14 Using the Navigation Wheel With CD Player/Changer



These are suggested settings. All buttons are user-definable.

Using the Navigation Wheel With a DVD Player/Changer

FIG. 48 describes functions available at the Navigation Wheel, when used with a DVD Player/Changer:

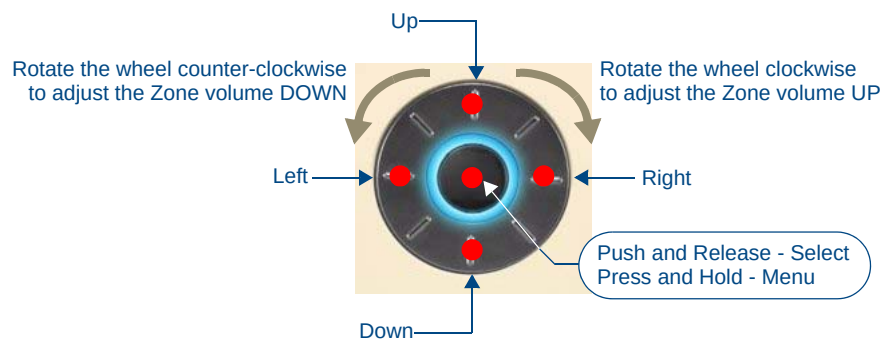


FIG. 15 Using the Navigation Wheel With DVD Player/Changer



These are suggested settings. All buttons are user-definable.

Using the Navigation Wheel With a Satellite Radio/Video Box

FIG. 49 describes functions available at the Navigation Wheel, when used with a DVD Player/Changer:

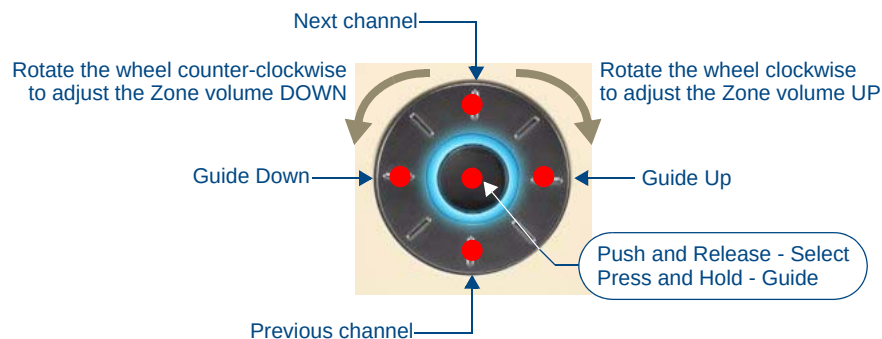


FIG. 16 Using the Navigation Wheel With Satellite Radio/Video Box



These are suggested settings. All buttons are user-definable.

Using the Navigation Wheel With an Audio Server

FIG. 50 describes functions available at the Navigation Wheel, when used with an Audio Server:

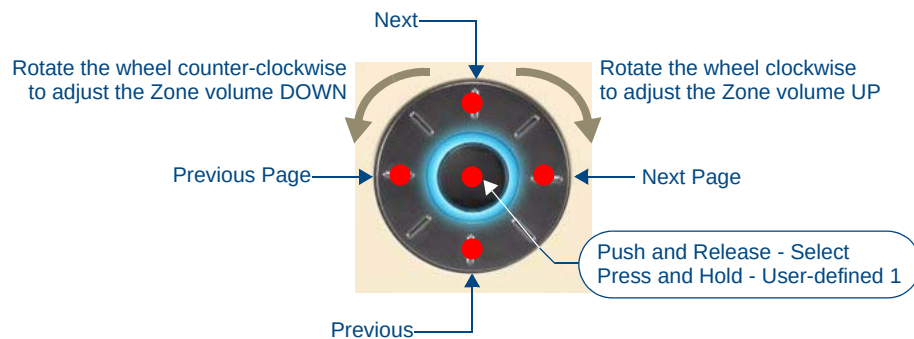


FIG. 17 Using the Navigation Wheel With Audio Server



These are suggested settings. All buttons are user-definable.

Using the Navigation Wheel With an External Tuner

FIG. 51 describes functions available at the Navigation Wheel, when used with an External Tuner:

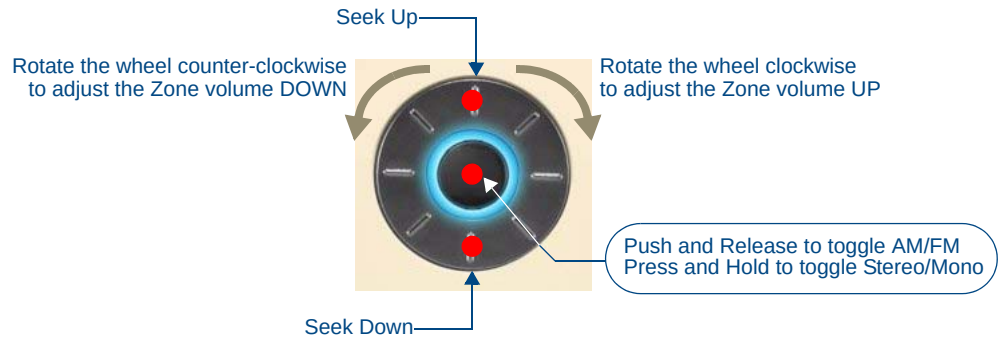


FIG. 18 Using the Navigation Wheel With External Tuner



These are suggested settings. All buttons are user-definable.

Using the Navigation Wheel With Other Sources

FIG. 51 describes functions available at the Navigation Wheel, when used with other sources:

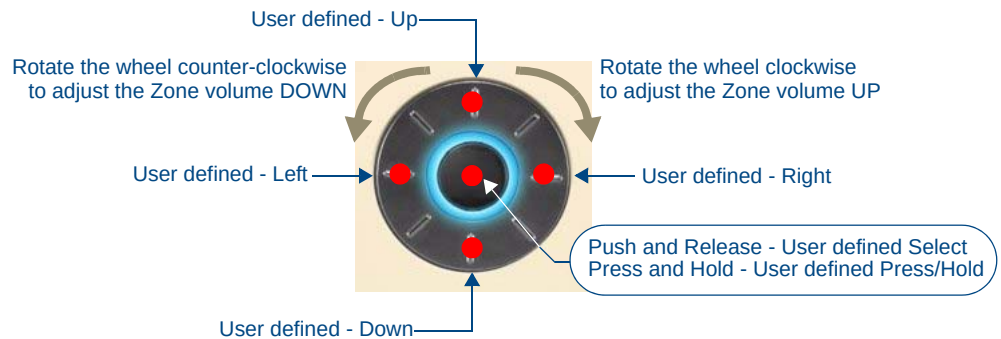


FIG. 19 Using the Navigation Wheel With Other sources



These are suggested settings. All buttons are user-definable.

Advanced Functions - DAS-MET-6SRC

Overview

The DAS-MET-NUM Numeric keypad is used in conjunction with the DAS-MET-6SRC keypad to provide enhanced functionality, including Direct Numeric Access, Zone Grouping, Favorites, Alarm (setting), Keypad Lockout and setting and recalling Presets.



The SWT Metreau Keypads function essentially the same as previous versions SWT keypads.

The standard configuration for the Audio (SWT) Keypads (DAS-MET-6SRC and DAS-MET-NUM) is described below. Note that while the functionality described here is fixed for the SWT Keypads, the AxLink Keypads can be customized, just like any other AxLink keypad.

Direct Access

On-Board Tuner - Direct Selection of a Radio Station

Using the DAS-MET-NUM keypad, enter the station identification and press **ENTER**.

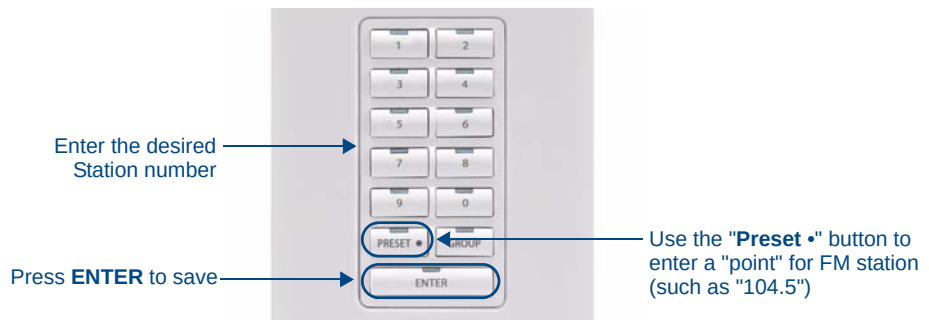


FIG. 1 Direct Selection of a Radio Station

1. Key in the **Station** identifier number using the "**PRESET •**" button to enter a "point" for FM stations.
2. Press **ENTER** to complete.



Strings of 3 to 4 numbers are recognized. If a "•" (point) is part of the string, then an FM station is assumed, otherwise an AM station is assumed.

Examples:

- **1050 + ENTER** = 1050AM
- **104•5 + ENTER** = 104.5FM
- **88•8 + ENTER** = 88.5FM

CD Player - Direct Selection of a Disk and Track

To select a specific disk and track, the format is **DDD•TTT + ENTER** (DDD = Disk & TTT = Track).

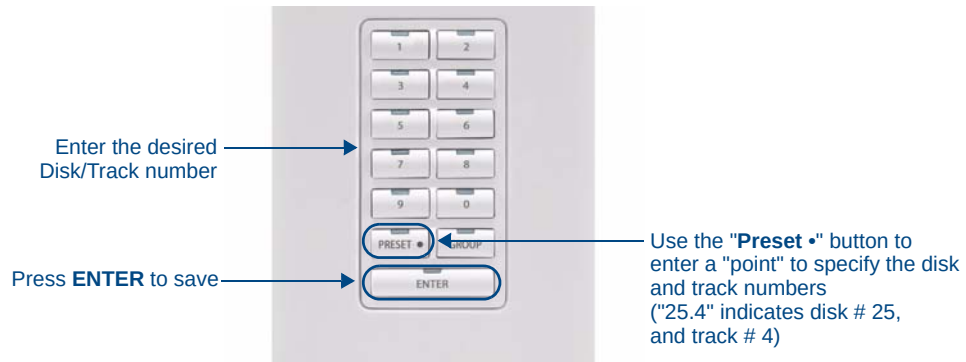


FIG. 2 Direct Selection of a Disk and Track

1. Enter the **Disk** number.
2. Press the "**PRESET •**" button.
3. Key in the **Track** number (for example, "25.4" indicates CD # 25, Track #4).
4. Press **ENTER** to complete.

Examples:

- **52•3 + ENTER** = Disk 52, Track 3
- **1•22 + ENTER** = Disk 1, Track 22
- **103•2 + ENTER** = Disk 103, Track 2

CD Player - Direct Selection of a Track On the Current Disk

To select a specific track on the current disk, enter **TTT + ENTER** (TTT=Track).

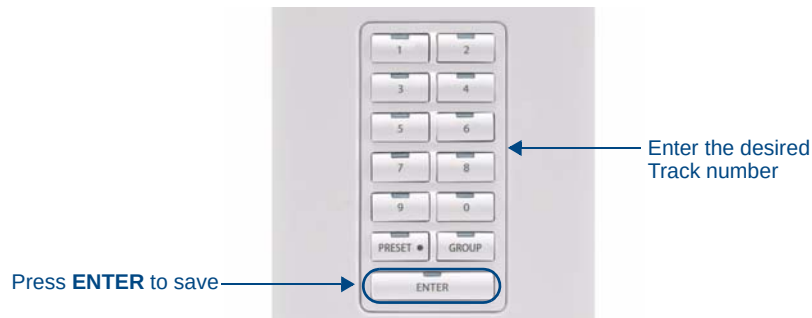


FIG. 3 Direct Selection of a Track On the Current Disk

To change the track while listening to a disk:

1. Key in the **Track** number.
2. Press **Enter** to complete.

Examples:

- **3 + ENTER** = current disk, Track 3
- **19 + ENTER** = current disk, Track 19

Cable and Satellite - Direct Selection of a Channel

To select a channel on a Cable or Satellite receiver, the format is **CCC + ENTER** (CCC=Channel #).

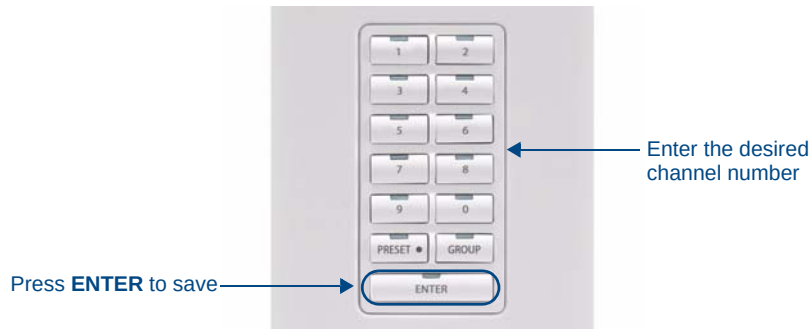


FIG. 4 Direct Selection of a Cable or Satellite Channel



This information also applies to selecting a Digital Cable Music (DCM) Channel.

To change the Cable or Satellite (or Digital Cable Music) channel:

1. Key in the Channel number.
2. Press **ENTER** to complete.



Strings of 2 to 4 numbers are recognized.

Examples:

- **202 + ENTER** = Channel 202 CNN DTV
- **501 + ENTER** = Channel 501 HBO DTV

Working With Presets

The DAS_MET_NUM can be used to store 10 presets for each source. Any Source that utilizes Direct Access can have presets programmed (including Matrix on-board AM/FM Tuners, External Tuners, Satellite Receivers, CD Players/Changers, DVD Players/Changers, Audio Servers and Satellite Radio).



*Presets are Source-specific but **not** Room-specific.*

Creating A Preset

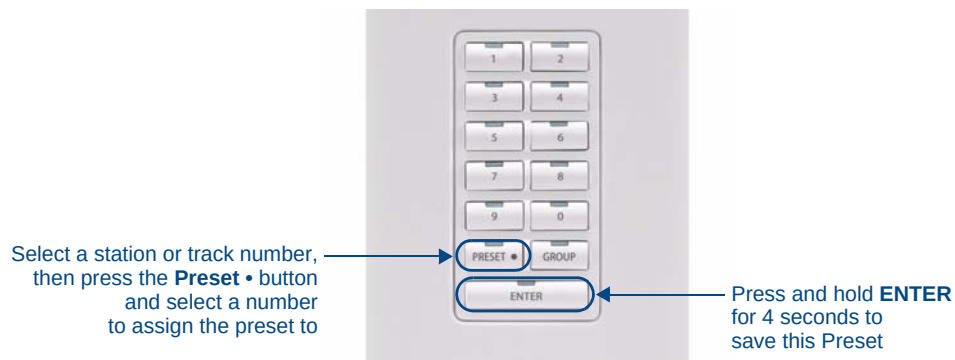


FIG. 5 Creating A Preset



Each Source can have up to ten Presets assigned to it.

1. Select a Source (CD or Tuner).
2. Select the desired entry (Station or Track number).
3. Press **ENTER**
4. Press the **PRESET •** button.
5. Enter a number for this Preset (1-10).
6. Press and hold **ENTER** for four seconds to complete.

Example:

To set station "104.5" as "Preset 3":

- a. Select a Tuner as the Source.
- b. Key in "104.5" (to tune to the desired station).
- c. Press **ENTER**.
- d. Press **PRESET •**.
- e. Press 3.
- f. Press and hold **ENTER** for four seconds.

Recalling A Preset

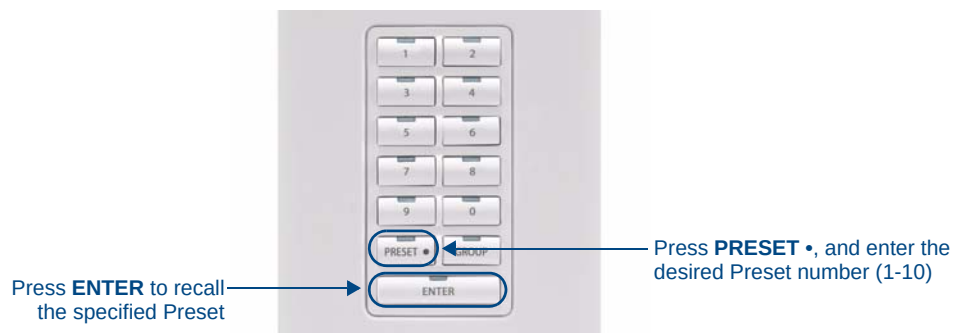


FIG. 6 Recalling A Preset

1. Select a Source.
2. Press **PRESET •** and enter the desired Preset number (1-10).
3. Press **ENTER** to recall the specified Preset.

Examples:

- **PRESET • + 5 + ENTER** = Recalls Preset #5
- **PRESET • + 1 + ENTER** = Recalls Preset #1
- **PRESET • + 4 + ENTER** = Recalls Preset #4

Clearing All Presets

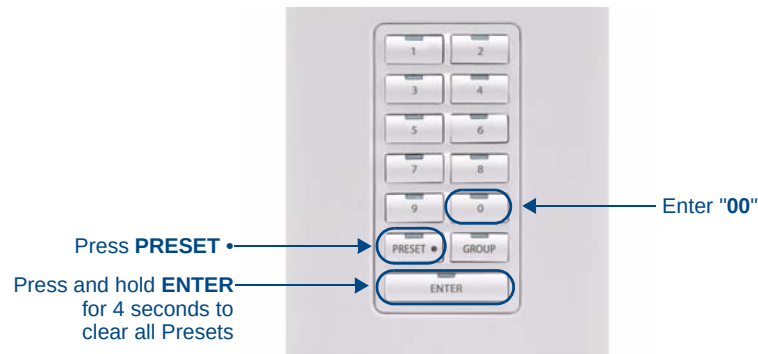


FIG. 7 Clearing All Presets

1. Select a Source.
2. Press **PRESET**.
3. Enter "00".
4. Press and hold **ENTER** for four seconds.

Example:

Press **PRESET** + **00** + press & hold **ENTER** = All presets will be cleared.

Working With Favorites

One *Favorite* can be programmed via the numeric keypad for each source in each zone. Favorites might include your favorite station, channel, or CD.

If a Favorite is set for a specific source in a specific zone, when that source is turned on (after System has been Off), the favorite will begin playing in that zone.



Favorites can only be set for Sources that utilize Direct Access functionality.

Creating a Favorite For a Specific Source

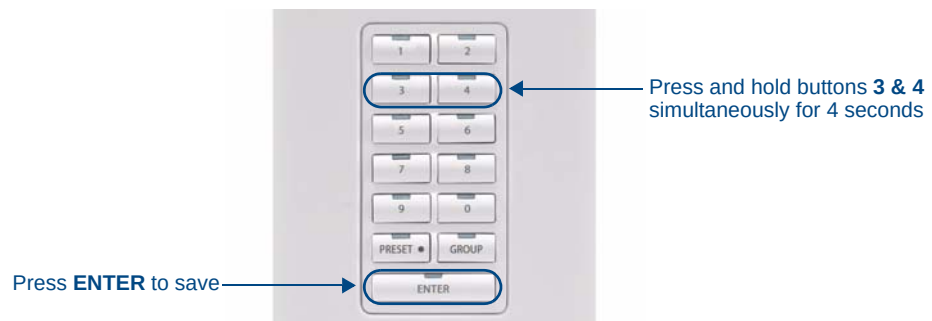


FIG. 8 Creating A Favorite For A Specific Source

1. Select a Source (CD or Tuner).
2. Tune or select the desired entry as the favorite for the selected Source.
3. Press and hold buttons **3** and **4** simultaneously for four seconds to set the selected Favorite for this Source (LED's will turn On).
4. Press **ENTER** to complete (LED's will turn Off).

Examples:

- **Tuner - 104.5 ENTER + 3 and 4 + ENTER** = 104.5FM is saved as the Favorite.
- **CD - 2.4 ENTER + 3 and 4 + ENTER** = Disk 2/Track 4 is saved as the Favorite.

Clearing Favorites For All Sources In a Specific Zone

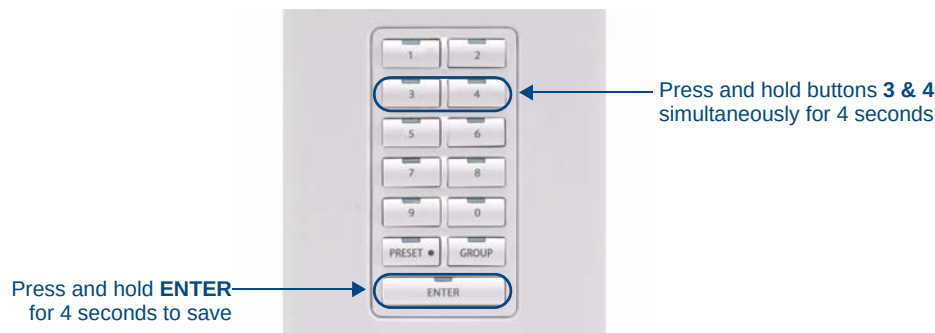


FIG. 9 Clearing Favorites For All Sources in a Specific Zone

1. Select a Source (CD or Tuner).
2. Simultaneously press and hold buttons **3** and **4** to enter *Favorites* mode for this Source (LED's will turn On).
3. Key in "00".
4. Press and hold **ENTER** to complete.

Working With Zone Grouping

In *Group Mode*, zones can be "grouped" together and controlled as a single zone. This feature is specifically designed to accommodate a situation where it is desirable to link a combination of rooms (zones) to a common source. For example when hosting a party and you wish to have the common areas all linked to the same audio source. When initially creating a zone group, all members of the group will have the volume set to the same level. The volume can then be adjusted on an individual zone basis, by using the Navigation Wheel (on the DAS-MET-6SRC keypad) in each zone. Group Volume may be adjusted at any time.

- To enter Group Mode, press the **Group** button (see FIG. 62).
- Group Mode is indicated by all Source LED's turned On.



NOTE

Group Mode can also be accessed by pressing and holding buttons 1 and 2 for four seconds (as is the case with earlier versions of Matrix keypads).

Adding a Zone To a Group

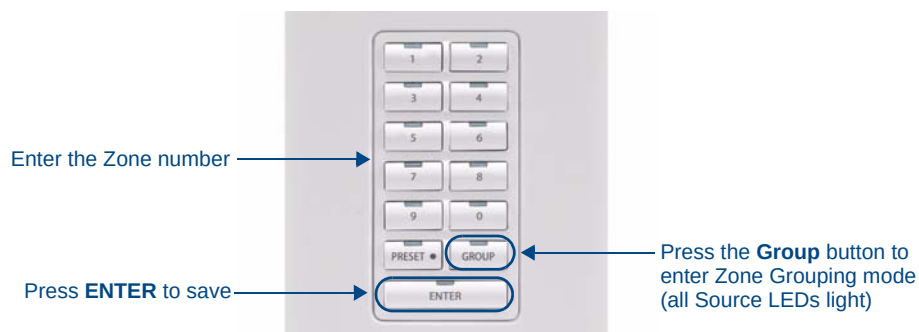


FIG. 10 Adding A Zone To Group

1. Press the **Group** button to enter *Group Mode* (all Source LED's turn On).
2. Enter the **Zone number** to add to the group.
3. Press **ENTER** to complete (Source LED's turn Off).

Example (from Keypad in Zone 1):

- Press **Group + 2 + ENTER** = Zone Grouping now includes Zone 1 & 2
- Press **Group + 4 + ENTER** = Zone Grouping now includes Zone 1,2 & 4



The Zone from which zone grouping is being administered, is assumed to be the first Zone in the Group. It should, therefore, not be added to the Zone Grouping.

Grouping All Zones

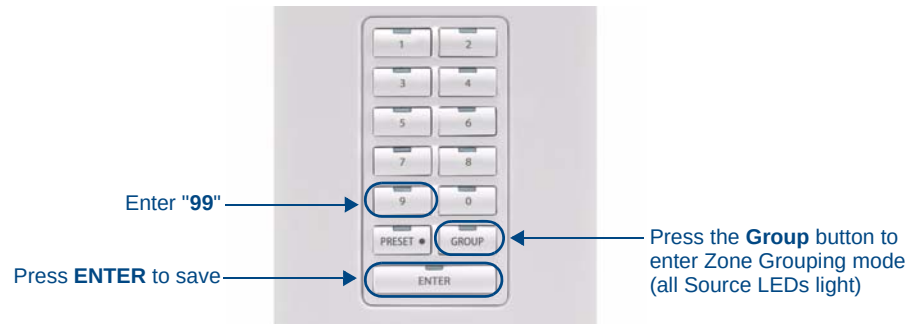


FIG. 11 Adding A Zone To Group

1. Press the **Group** button to enter *Group Mode* (all Source LED's turn On).
2. Enter "99".
3. Press **ENTER** to complete.

Un-Grouping All Zones

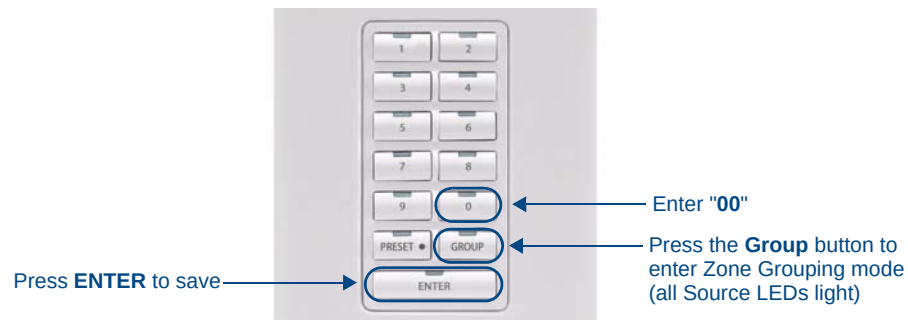


FIG. 12 Ungrouping All Zones

1. Press the **Group** button to enter *Group Mode* (all Source LED's turn On).
2. Enter "00".
3. Press **ENTER** to complete.

Grouping Volume Control

When initially creating a zone grouping, all members of the group will have the volume set to the same level. The volume can then be adjusted on an individual zone basis, by using the Navigation Wheel (on the DAS-MET-6SRC keypad) in each zone. Adjusting the volume level for the entire Group can be made at any time, as described below:

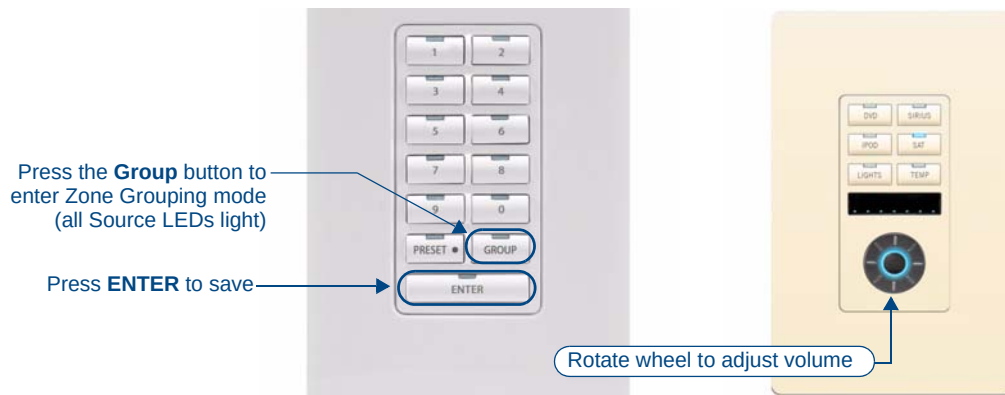


FIG. 13 Grouping Volume Control

1. Press the **Group** button to enter *Group Mode* (all Source LED's turn On).).
2. Adjust Volume using the Navigation Wheel (on the DAS-MET-6SRC keypad).



NOTE

All Zones will have the volume incremented by the adjustment being made.

3. Press **ENTER** to complete.



NOTE

To bring all Zones to the same volume level (after individual Zone adjustments have been made), enter Zone Grouping mode (Buttons 1&2) and decrease the volume to 0db, then increase the volume to desired level.

Working With Alarms

To use the Alarm feature, a System Time must first be entered on the Main Controller, via the Front LCD. To set an alarm from each Keypad, select a Source, adjust the volume, and set the alarm time (using 24HR clock, as described below).

When the alarm time is reached, the Source selected will turn On, and the volume will ramp up to the set volume and begin playing. At this point the source will behave normally.



NOTE

If a Favorite has been set, the Favorite will begin playing. Otherwise, the last station/ CD will begin playing.

Setting the System Clock on the Tango Audio Controller

From the LCD on the front panel of the Tango Audio Controller:

1. Select **CLOCK**
2. Select **Set Time** to display the following screen (FIG. 66):

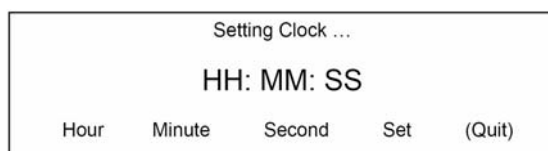


FIG. 14 Setting the System Clock on the Tango Audio Controller

3. Press **Hour** to increment the HH (hours) from 1 through 24.
4. Press **Minute** to increment the MM (minutes) from 01 through 60.
5. Press **Second** to increment the SS (seconds) from 01 through 60.
6. Press **Set** to set the clock to the time displayed.

Refer to the *Tango Audio Controller Operation/Reference Guide* for details.

Setting an Alarm In a Zone

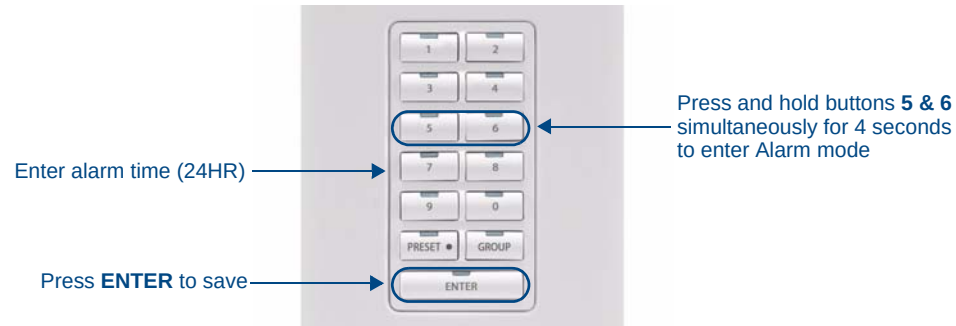


FIG. 15 Setting Alarm In a Zone

1. Select Source and adjust the Volume to desired level.
2. Press and hold buttons **5 and 6** simultaneously for four seconds (Source LED's turn ON).
3. Enter the **24HR Time** for alarm (use **PRESET •** to separate Hours and Minutes).
4. Press **ENTER** to complete (source LED's turn OFF).

Example:

- press **5 and 6 + 6 • 30 + ENTER** = alarm set for 6:30 AM
- press **5 and 6 + 18 • 30 + ENTER** = alarm set for 6:30 PM

Clearing the Alarm For a Specific Zone

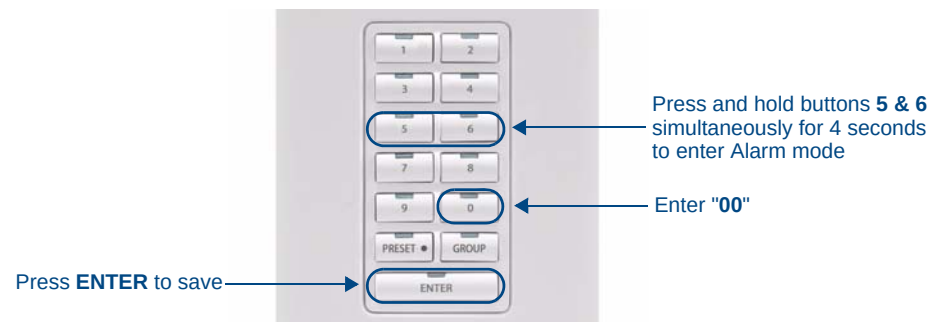


FIG. 16 Clearing the Alarm For a Specific Zone

1. Press and hold buttons **5 and 6** simultaneously for four seconds (Source LED's turn ON).
2. Enter **"00"**.
3. Press **ENTER** to complete (source LED's turn OFF).

Clearing All Alarms For All Zones

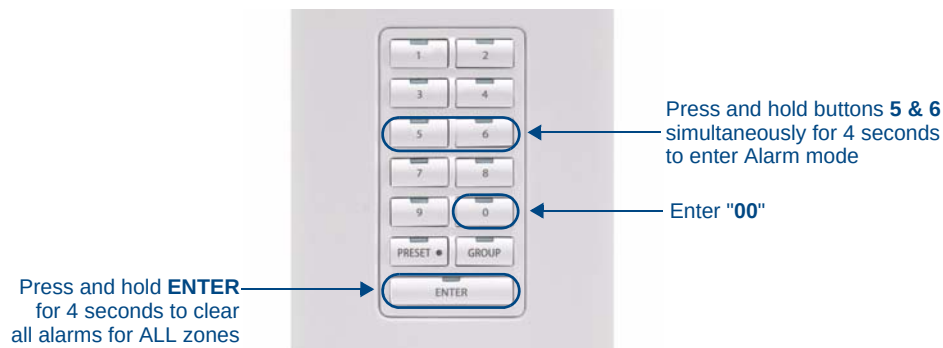


FIG. 17 Clearing All Alarms For All Zones

1. Press and hold buttons **5 and 6** simultaneously for four seconds.
2. Key in "00".
3. Press and hold **ENTER** for four seconds to complete.

Keypad Lockout

Keypad Lockout functionality allows the user to lock any keypad from any other keypad in the system.

For example, if the user wants to lock the keypad in their rooms, the user can access the lockout feature from any keypad in the house. Once the keypads are locked the children can no longer control the system from the keypad in their rooms.

If the user wants to lockout a keypad's ability to control the system, it can be setup from any keypad in any zone that has a DAS-MET-NUM keypad installed.

Locking a Keypad

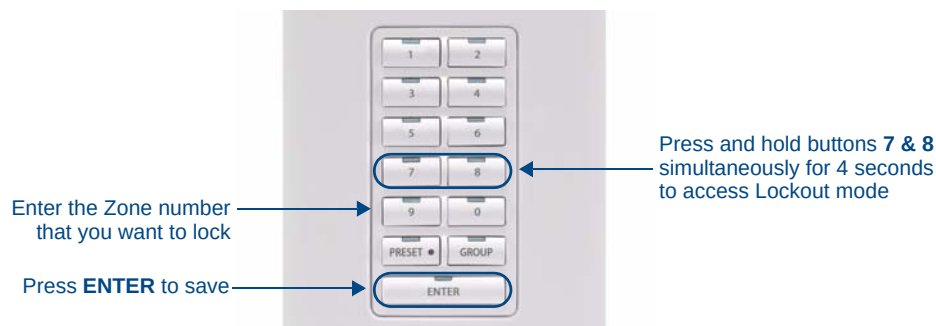


FIG. 18 Locking A Keypad

1. Press and hold buttons **7 and 8** simultaneously for four seconds (Source LED's turn On).
2. Enter the **Zone number** to Lock.
3. Press **ENTER** to complete (Source LED's turn Off).



You may not lockout the same keypad that you have accessed to setup the Keypad Lockout feature (so that the keypad that is accessing the lockout feature cannot lockout itself).

Examples:

- Press and hold **7 and 8** (for 4 seconds) + **2** + **ENTER** = keypad in zone #2 will be locked.
- Press and hold **7 and 8** (for 4 seconds) + **4** + **ENTER** = keypad in zones #2 & #4 will be locked.

Unlocking a Keypad

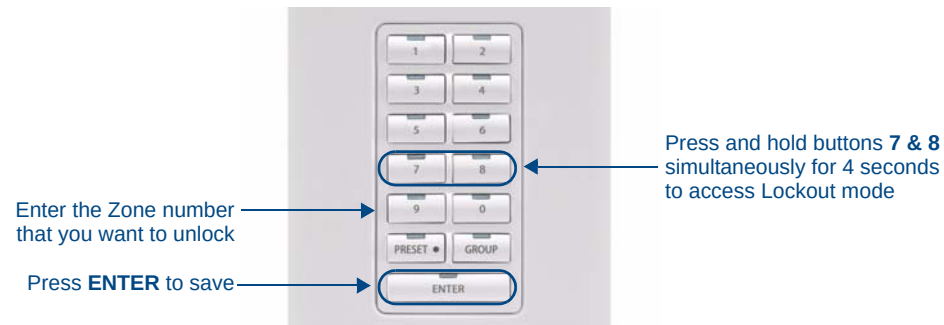


FIG. 19 Unlocking A Keypad



Unlocking a keypad must be done at the keypad that originally locked the keypad.

1. Press and hold buttons **7 and 8** simultaneously for four seconds (Source LED's turn On).
2. Enter the **Zone number** to unlock.
3. Press and hold **ENTER** for four seconds to complete (Source LED's turn Off).

Examples:

- Press and hold **7 and 8** (for 4 seconds) + **2 + ENTER** = keypad in zone #2 will be Locked.
- Press and hold **7 and 8** (for 4 seconds) + **4 + ENTER** = keypad in zones #2 and #4 will be Locked.
- Press and hold **7 and 8** (for 4 seconds) + **2 + press and hold ENTER** for four seconds =
 - Keypad in zone #2 will be Unlocked.
 - Keypad in zone #4 remains Locked.

Unlocking All Keypads

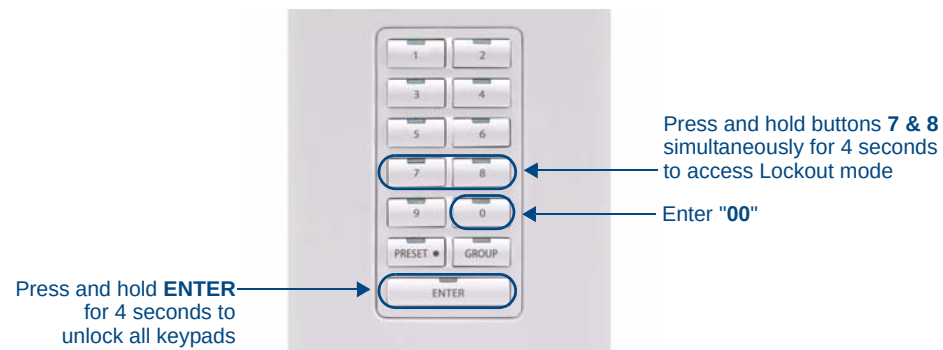


FIG. 20 Unlocking All Keypads

1. Simultaneously press buttons **7 and 8** (Source LED's turn On).
2. Key in **"00"**.
3. Press and hold **ENTER** for four seconds to complete (Source LED's turn Off).

Examples:

- Press **7 and 8 + 2 + ENTER** = keypad in zone #2 will be Locked.
- Press **7 and 8 + 4 + ENTER** = keypad in zones #2 & #4 will be Locked.
- Press **7 and 8 + 00 + press & hold ENTER** for four seconds = Keypads in Zones #2 and #4 will both be Unlocked.

Using the NetLinx Module

Overview

The Tango system can be controlled via the Touch Pages provided with the NetLinx Module, as described in this section. Refer to the NetLinx module documentation for details on incorporating the module into your source code and loading it onto the NetLinx Master.

Main Page (Initial View)

The initial view of the touch panel pages is the Main Page, featuring the Menu Bar along the left edge, as shown in FIG. 73:

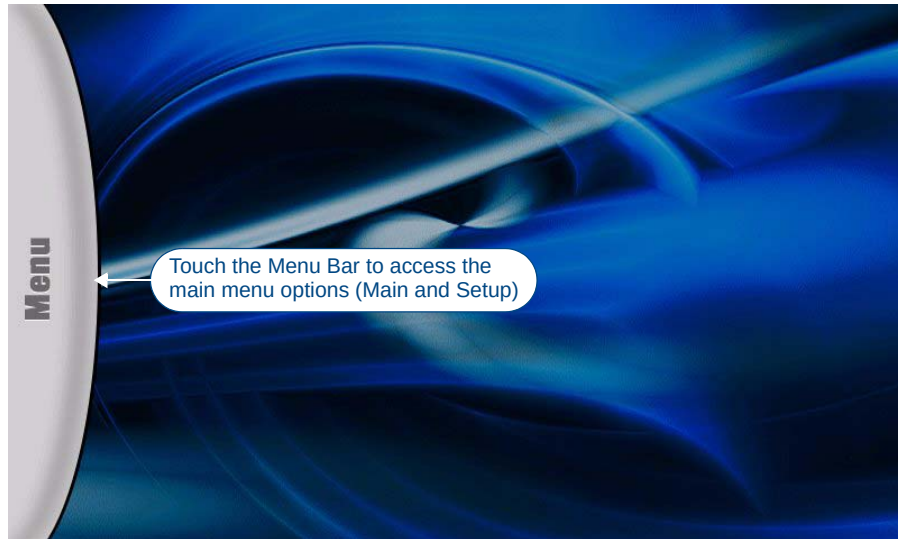


FIG. 1 Main Page (Initial View)

Press the Menu Bar to access the two primary menu options (**Main** and **Setup**), as shown in FIG. 74:



FIG. 2 Main Page - Menu Bar options

Main Pages

Press **Main** in the Menu Bar to access the **Locations** page (FIG. 75). The options on this page allow you select Locations (*Zones*) to specify a Source Device to use with each Location, and configure audio settings for each Location.



FIG. 3 Locations Page

Location/Device Pages

Press one of the **Locations** buttons to invoke the Location/Device page for the selected Zone. This page provides playback controls for the device currently associated with the selected Location (*Zone*). As an example, FIG. 76 indicates that the "Dining Room" is currently using a DVD Player as it's Source Device:



FIG. 4 Example Location/Device Page

- The currently selected Location is indicated in the upper-left corner of the page (in this case, "DVD").
- The Device currently associated with this location is indicated in the upper-right corner (in this case, "Dining Room").



NOTE

The playback controls presented on this page will vary, depending on the device type associated with the Location.

The **Zone Options** and **Change Source** buttons provide additional options:

- Press **Zone Options** to configure audio settings for this Location (Zone).
- Press **Change Source** to select a different source Device for this Location.

Zone Options

From a Location / Device page, press **Zone Options** to invoke the *Zone Options* popup shown in FIG. 77:

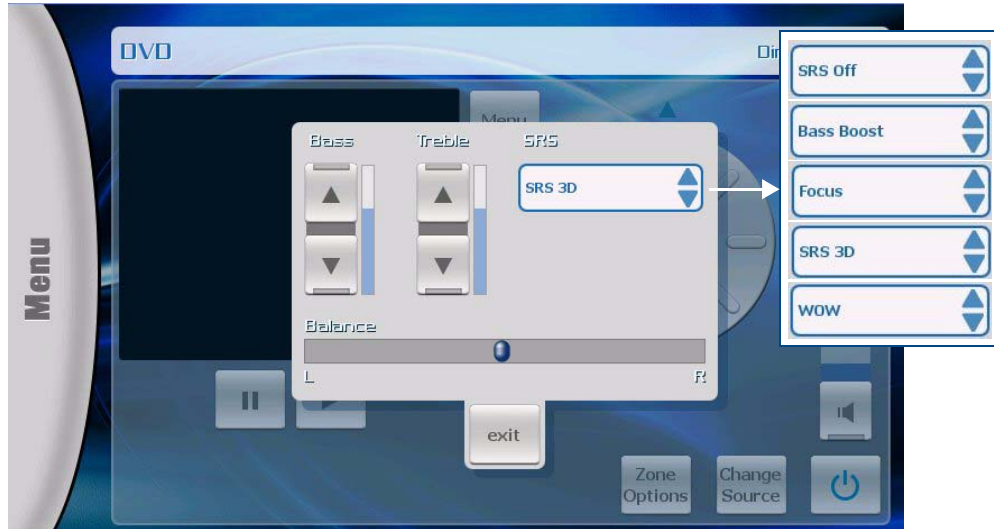


FIG. 5 Zone Options popup

- Use the Up/Down buttons to adjust **Bass** and **Treble** for this Location. The current levels are indicated in the vertical status bars adjacent to each set of Up/Down buttons (default = *flat*).
- Touch-and-drag the slider to adjust the **Balance** setting (default = *centered*).
- Touch the SRS menu to select an **SRS mode** (default = *SRS Off*).
- When finished, press **exit** to apply changes and close the *Zone Options* popup.

Change Source

From a Location / Device page, press **Change Source** to invoke the *Sources* page for this Location, as shown in FIG. 78:

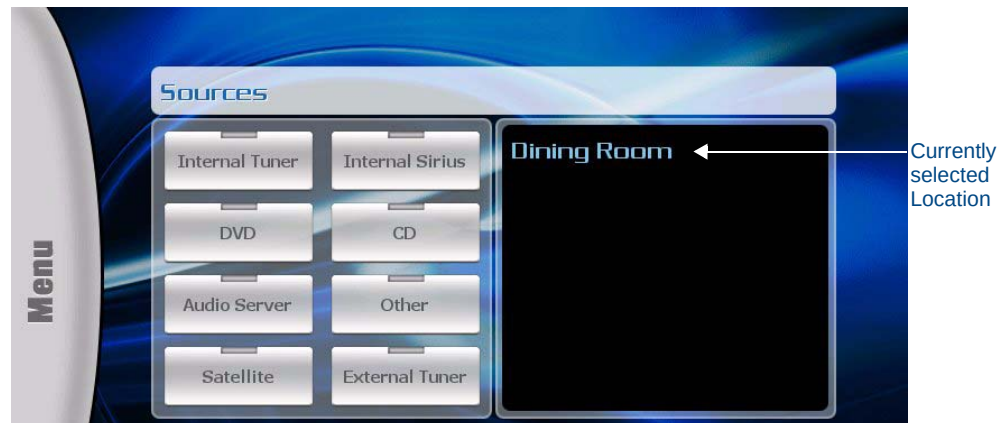


FIG. 6 Sources Page (for the "Dining Room" Location)

This page allows you to change the source device to be used for the selected Location. Note that the currently selected Location is indicated on the right side of this page.

To change sources for this Location, simply press the desired Source button. This action invokes the Device Control Page for the selected Device type. Use the options in the Device Control page to control playback.

Device Control Pages

There is separate Device Control page for each device type, with options specific to each device type, as described in the following sub-sections.

Internal Tuner

Touch **Internal Tuner** to invoke the Device Control page shown in FIG. 79:

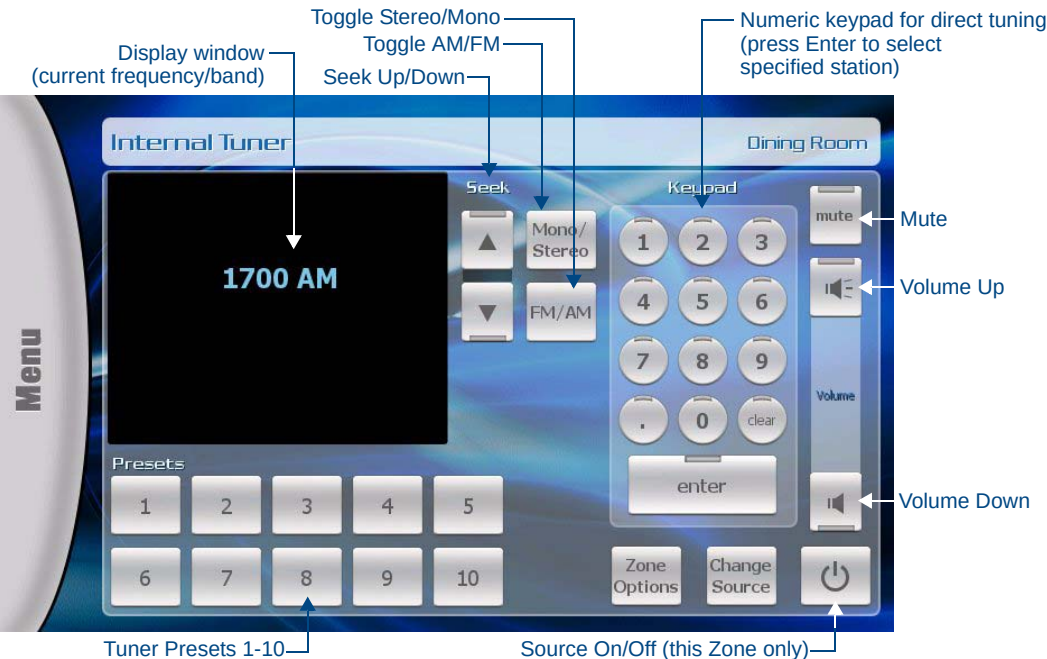


FIG. 7 Device Control page - Internal Tuner

The options on this page include:

Device Control Page - Internal Tuner	
Display Window:	Displays the current frequency and band (AM/FM).
Seek Up/Down:	Press the Up and Down arrow buttons to seek up/down on the selected band.
Mono/Stereo:	Press to toggle mono/stereo (default = Stereo).
FM/AM:	Press to toggle band (FM/AM)
Keypad:	Use the keypad button for direct tuning. Press enter to tune to the specified frequency. Note that the tuner automatically detects the band (AM/FM) based on the number entered.
Presets:	Use the Presets buttons to recall up to ten station presets.
Zone Options:	Press to access the Zone Options popup for configuring audio settings for the selected Location (Zone). Note that the currently selected Location is indicated in the upper-right corner of the page (see the <i>Zone Options</i> section on page 63).
Change Source:	Press to access the Sources page for this location. Note that the currently selected Source is indicated in the upper-left corner of the page (see the <i>Change Source</i> section on page 63).
Mute:	Press to mute the audio.
Volume Up/Down:	Press the Up and Down arrow buttons to adjust the volume up/down.
Power On/Off:	Press to toggle the Source device Off/On, in this Zone only. The source device will continue playback in other Zones.

Internal Sirius

Touch **Internal Sirius** to invoke the Device Control page shown in FIG. 80:

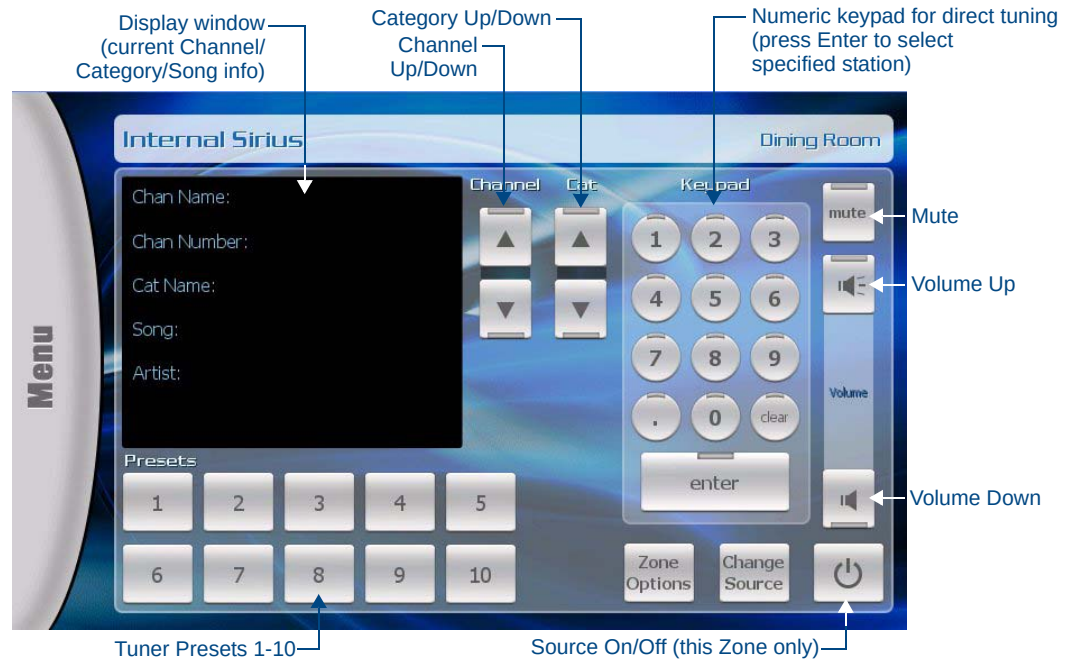


FIG. 8 Device Control page - Internal Sirius

The options on this page include:

Device Control Page - Internal Sirius	
Display Window:	Displays the current Channel, Category and Song info (as provided by Sirius).
Channel Up/Down:	Press the Up and Down arrow buttons to browse up/down in the selected Category.
Cat:	Press the Up and Down arrow buttons to browse up/down through the Categories list.
Keypad:	Use the keypad button for direct tuning. Press enter to tune to the specified channel.
Presets:	Use the Presets buttons to recall up to ten station presets.
Zone Options:	Press to access the Zone Options popup for configuring audio settings for the selected Location (Zone). Note that the currently selected Location is indicated in the upper-right corner of the page (see the <i>Zone Options</i> section on page 63).
Change Source:	Press to access the Sources page for this location. Note that the currently selected Source is indicated in the upper-left corner of the page (see the <i>Change Source</i> section on page 63).
Mute:	Press to mute the audio.
Volume Up/Down:	Press the Up and Down arrow buttons to adjust the volume up/down.
Power On/Off:	Press to toggle the Source device Off/On, in this Zone only. The source device will continue playback in other Zones.

DVD

Touch **DVD** to invoke the Device Control page shown in FIG. 81:

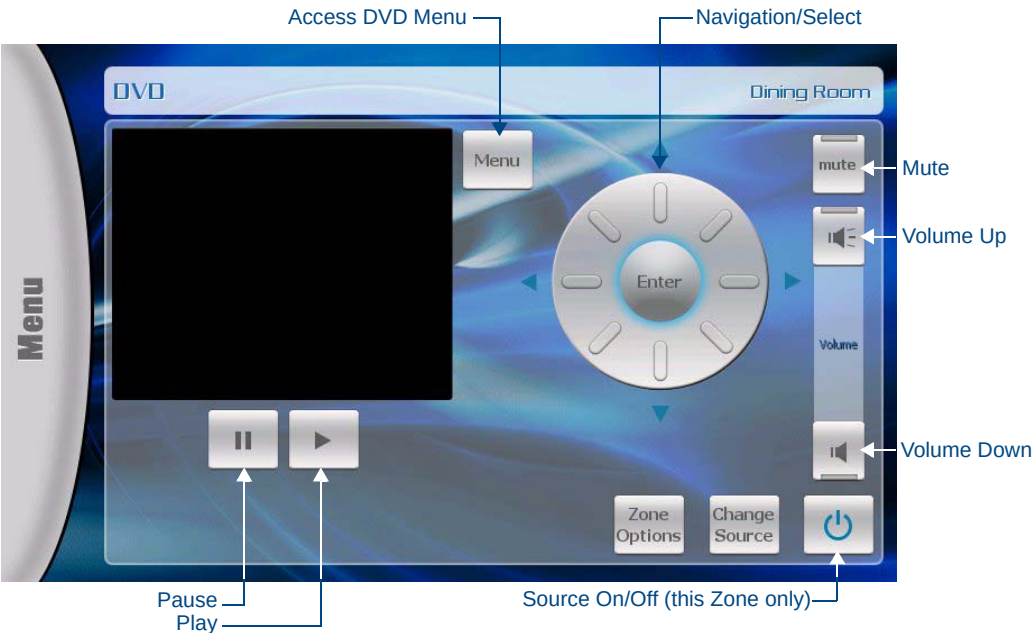


FIG. 9 Device Control page - DVD

The options on this page include:

Device Control Page - DVD	
Play/Pause:	Press to control DVD playback.
Menu:	Press to access the DVD's menu screen.
Navigation/Select:	Use the directional buttons (Up, Down, Left and Right) to navigate DVD menus, and press Enter to select.
Zone Options:	Press to access the Zone Options popup for configuring audio settings for the selected Location (Zone). Note that the currently selected Location is indicated in the upper-right corner of the page (see the <i>Zone Options</i> section on page 63).
Change Source:	Press to access the Sources page for this location. Note that the currently selected Source is indicated in the upper-left corner of the page (see the <i>Change Source</i> section on page 63).
Mute:	Press to mute the audio.
Volume Up/Down:	Press the Up and Down arrow buttons to adjust the volume up/down.
Power On/Off:	Press to toggle the Source device Off/On, in this Zone only. The source device will continue playback in other Zones.

CD

Touch **CD** to invoke the Device Control page shown in FIG. 82:

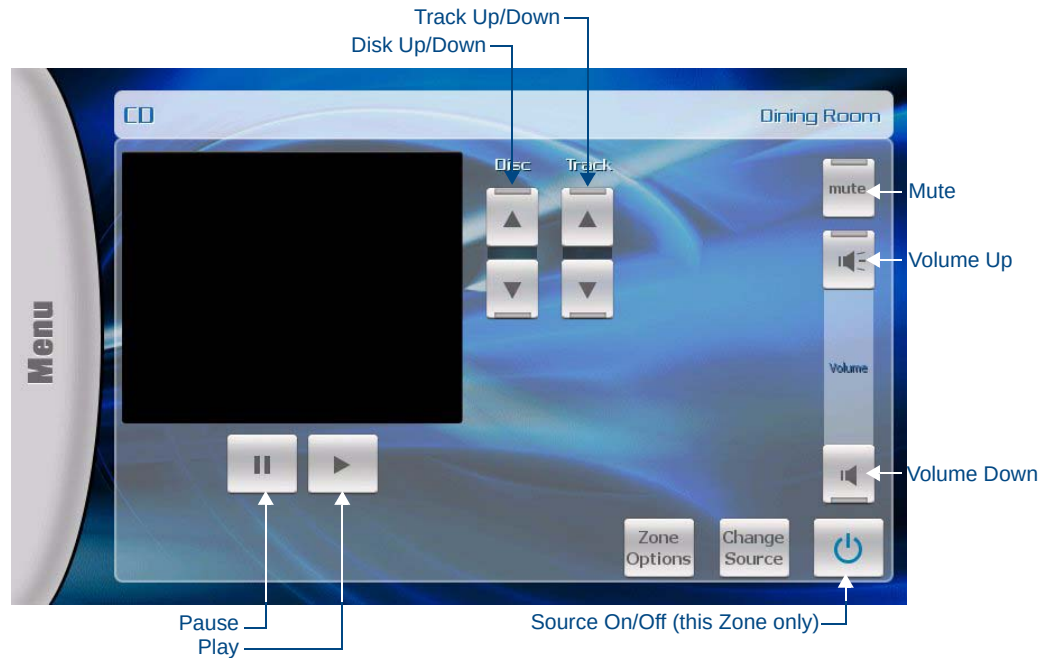


FIG. 10 Device Control page - CD

The options on this page include:

Device Control Page - CD	
Play/Pause:	Press to control CD playback.
Disk:	Press the Up button to select the next CD, press the Down button to select the previous CD.
Track:	Press the Up button to select the next track, press the Down button to select the previous track.
Zone Options:	Press to access the Zone Options popup for configuring audio settings for the selected Location (Zone). Note that the currently selected Location is indicated in the upper-right corner of the page (see the <i>Zone Options</i> section on page 63).
Change Source:	Press to access the Sources page for this location. Note that the currently selected Source is indicated in the upper-left corner of the page (see the <i>Change Source</i> section on page 63).
Mute:	Press to mute the audio.
Volume Up/Down:	Press the Up and Down arrow buttons to adjust the volume up/down.
Power On/Off:	Press to toggle the Source device Off/On, in this Zone only. The source device will continue playback in other Zones.

Audio Server

Touch **Audio Server** to invoke the Device Control page shown in FIG. 83:

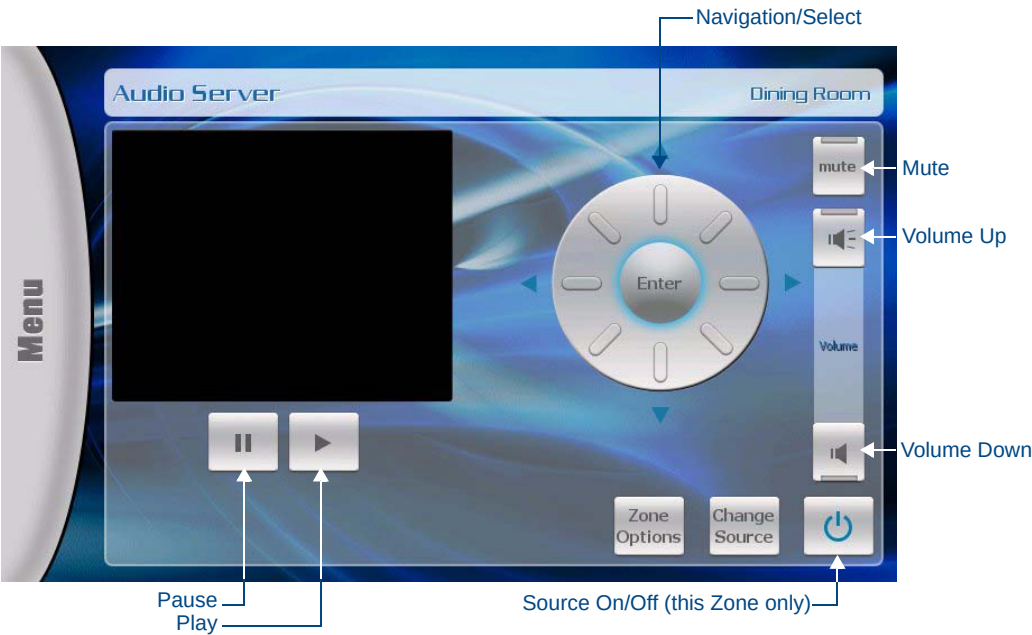


FIG. 11 Device Control page - Audio Server

The options on this page include:

Device Control Page - Audio Server	
Play/Pause:	Press to control CD playback.
Navigation/Select:	Use the directional buttons (Up, Down, Left and Right) to navigate DVD menus, and press Enter to select.
Zone Options:	Press to access the Zone Options popup for configuring audio settings for the selected Location (Zone). Note that the currently selected Location is indicated in the upper-right corner of the page (see the <i>Zone Options</i> section on page 63).
Change Source:	Press to access the Sources page for this location. Note that the currently selected Source is indicated in the upper-left corner of the page (see the <i>Change Source</i> section on page 63).
Mute:	Press to mute the audio.
Volume Up/Down:	Press the Up and Down arrow buttons to adjust the volume up/down.
Power On/Off:	Press to toggle the Source device Off/On, in this Zone only. The source device will continue playback in other Zones.

Satellite

Touch **Satellite** to invoke the Device Control page shown in FIG. 80:

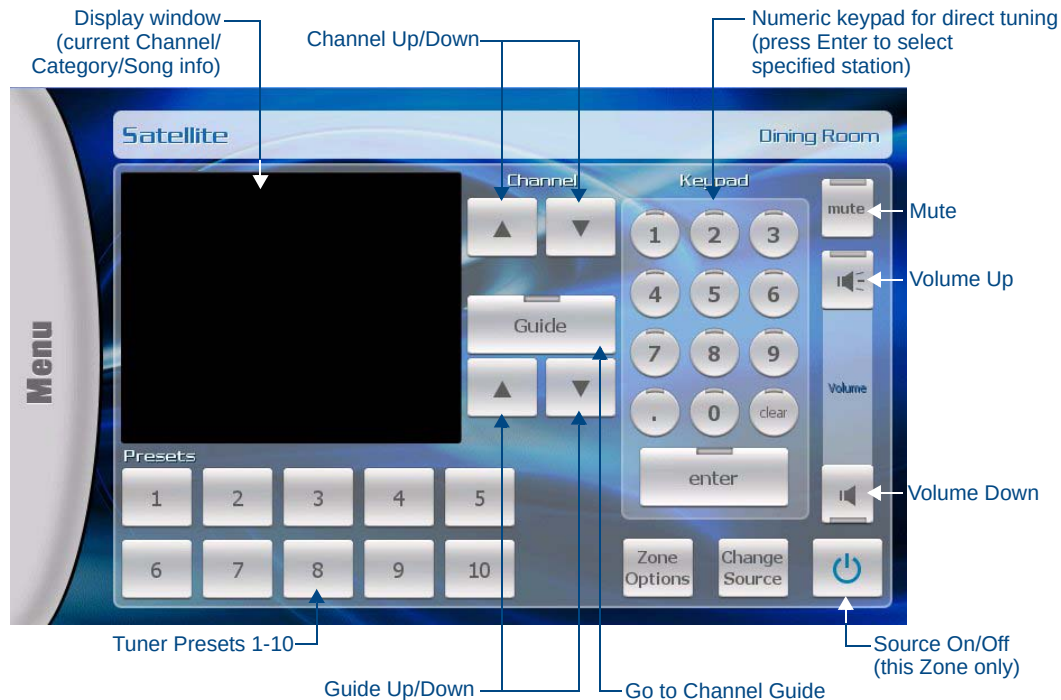


FIG. 12 Device Control page - Satellite

The options on this page include:

Device Control Page - Satellite	
Display Window:	Displays the current Channel, Category and Song info.
Channel Up/Down:	Press the Up and Down arrow buttons to browse up/down in the selected Category.
Guide Up/Down:	Press the Up and Down arrow buttons to browse up/down through the Guide.
Keypad:	Use the keypad button for direct tuning. Press enter to tune to the specified channel.
Presets:	Use the Presets buttons to recall up to ten station presets.
Zone Options:	Press to access the Zone Options popup for configuring audio settings for the selected Location (Zone). Note that the currently selected Location is indicated in the upper-right corner of the page (see the <i>Zone Options</i> section on page 63).
Change Source:	Press to access the Sources page for this location. Note that the currently selected Source is indicated in the upper-left corner of the page (see the <i>Change Source</i> section on page 63).
Mute:	Press to mute the audio.
Volume Up/Down:	Press the Up and Down arrow buttons to adjust the volume up/down.
Power On/Off:	Press to toggle the Source device Off/On, in this Zone only. The source device will continue playback in other Zones.

External Tuner

Touch **External Tuner** to invoke the Device Control page shown in FIG. 85:

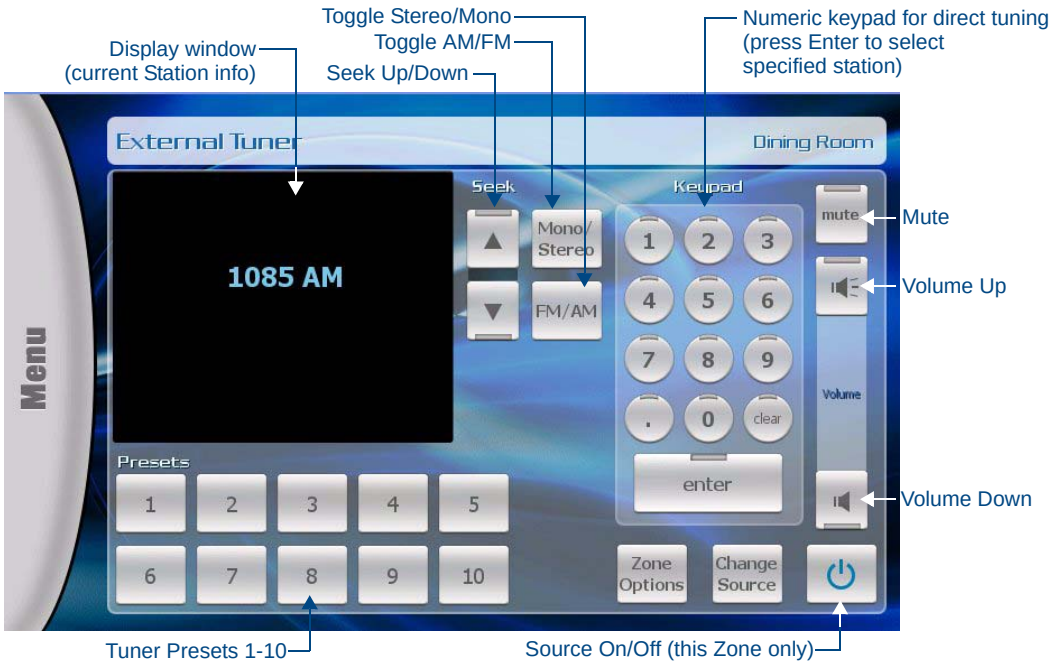


FIG. 13 Device Control page - External Tuner

The options on this page include:

Device Control Page - External Tuner	
Display Window:	Displays the current Channel, Category and Song info.
Seek Up/Down:	Press the Up and Down arrow buttons to seek up/down on the selected band.
Mono/Stereo:	Press to toggle mono/stereo (default = Stereo).
FM/AM:	Press to toggle band (FM/AM)
Keypad:	Use the keypad button for direct tuning. Press enter to tune to the specified frequency. Note that the tuner automatically detects the band (AM/FM) based on the number entered.
Presets:	Use the Presets buttons to recall up to ten station presets.
Zone Options:	Press to access the Zone Options popup for configuring audio settings for the selected Location (Zone). Note that the currently selected Location is indicated in the upper-right corner of the page (see the <i>Zone Options</i> section on page 63).
Change Source:	Press to access the Sources page for this location. Note that the currently selected Source is indicated in the upper-left corner of the page (see the <i>Change Source</i> section on page 63).
Mute:	Press to mute the audio.
Volume Up/Down:	Press the Up and Down arrow buttons to adjust the volume up/down.
Power On/Off:	Press to toggle the Source device Off/On, in this Zone only. The source device will continue playback in other Zones.

Other

Touch **Other** to invoke the Device Control page shown in FIG. 85:

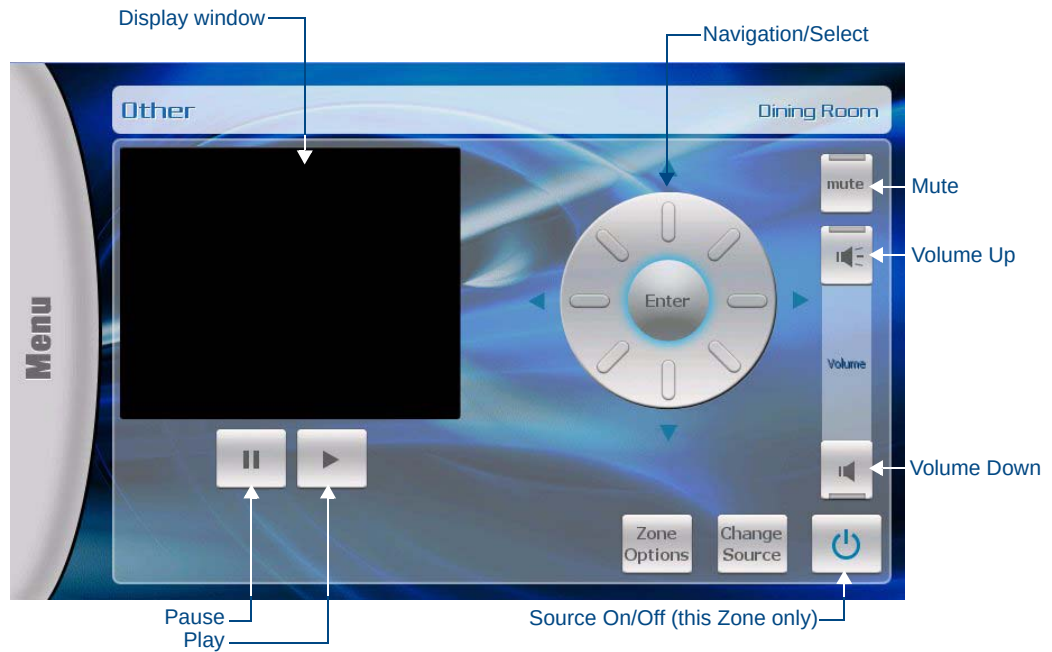


FIG. 14 Device Control page - Other

The options on this page include:

Device Control Page - Other	
Display Window:	Displays information on the current selection (display depends on the device type).
Play/Pause:	Press to control playback.
Navigation/Select:	Use the directional buttons (Up, Down, Left and Right) to navigate device menus, and press Enter to select.
Zone Options:	Press to access the Zone Options popup for configuring audio settings for the selected Location (Zone). Note that the currently selected Location is indicated in the upper-right corner of the page (see the <i>Zone Options</i> section on page 63).
Change Source:	Press to access the Sources page for this location. Note that the currently selected Source is indicated in the upper-left corner of the page (see the <i>Change Source</i> section on page 63).
Mute:	Press to mute the audio.
Volume Up/Down:	Press the Up and Down arrow buttons to adjust the volume up/down.
Power On/Off:	Press to toggle the Source device Off/On, in this Zone only. The source device will continue playback in other Zones.

Setup Pages

Press **Setup** in the Menu Bar to access the main **Setup** page. The options on this page allow you to access *Zones* and *Alarms*. The initial view of the Setup pages is the *Zones* page (FIG. 87)



FIG. 15 Setup page (initial view - Zones)

Setup - Zones

Touch any of the Zones buttons to edit the selected Zone's label, via the on-screen keyboard shown in FIG. 88:

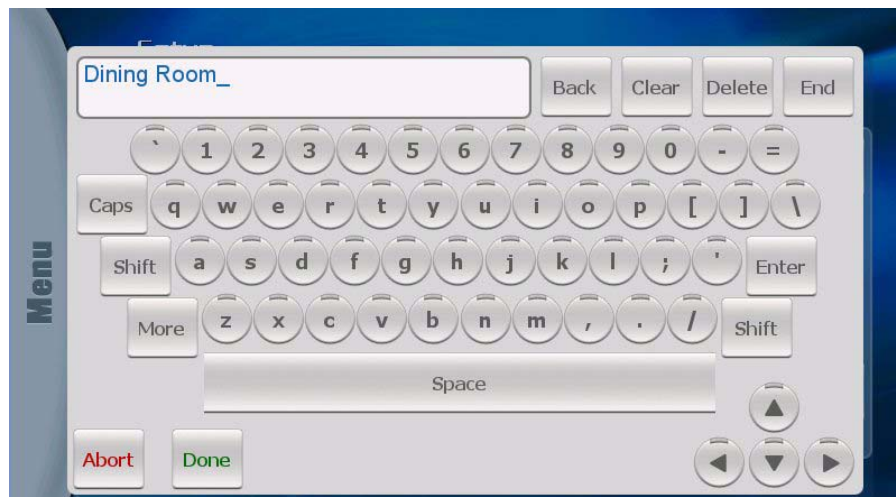


FIG. 16 On-Screen Keyboard (editing a Zone label)

- Press **Enter** to create a carriage return
- Press **Done** to save your changes
- Press **Abort** to close the keyboard, without saving changes.

Setup - Alarms

Press **Alarm** on the main Setup page to access the *Alarms* page (FIG. 89). Use the options in this page to set alarms for one or more selected Zones. An "Alarm" can be programmed to play a specific source in any specified Zone.



FIG. 17 Setup - Alarms page

Adding an Alarm

1. Touch one of the location (Zone) buttons to select the Zone for which you want to set an alarm.
2. Set the start time for the alarm using the H (hour) and M (minute) up/down arrows. Note that the alarm clock uses a 24-hour clock time. Refer to the following table to quickly convert regular time to 24-hour clock time standards:

Regular Time	24-hour Clock (hour value)	Regular Time	24-hour Clock (hour value)
Midnight	00	Noon	12
1:00 a.m.	01	1:00 p.m.	13
2:00 a.m.	02	2:00 p.m.	14
3:00 a.m.	03	3:00 p.m.	15
4:00 a.m.	04	4:00 p.m.	16
5:00 a.m.	05	5:00 p.m.	17
6:00 a.m.	06	6:00 p.m.	18
7:00 a.m.	07	7:00 p.m.	19
8:00 a.m.	08	8:00 p.m.	20
9:00 a.m.	09	9:00 p.m.	21
10:00 a.m.	10	10:00 p.m.	22
11:00 a.m.	11	11:00 p.m.	23

- Regular and 24-hour clock time use the same number of minutes per hour and they use minutes in exactly the same way. There is no need to convert minutes when going back and forth between the two time systems.
 - The alarm clock treats midnight as the start of a new day and express it as "0000".
3. Once the time has been set, the "choose source" option is enabled (FIG. 90):



FIG. 18 Setup - Alarms page with Zone and Time selected

4. Touch "**choose source**" to specify the source device to be used as the alarm (FIG. 91):

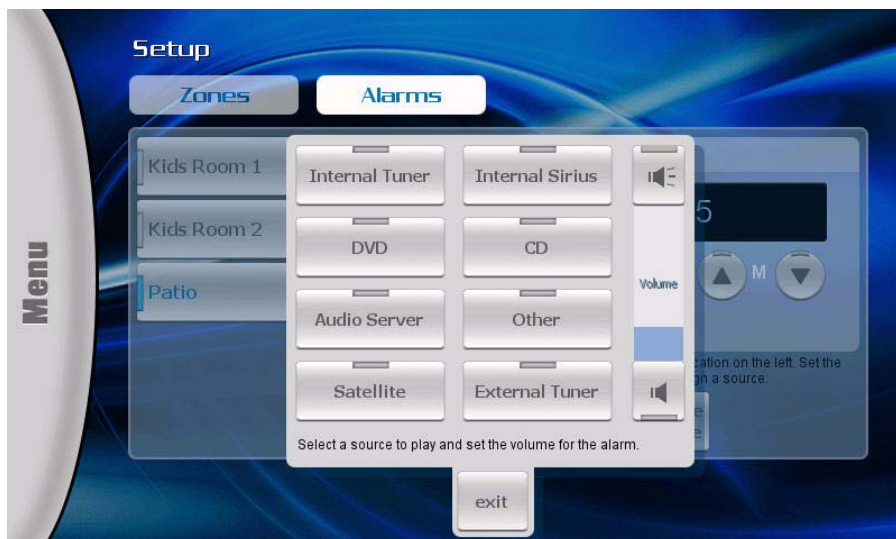


FIG. 19 Alarms page - select a Source



The **exit** button allows you to close the Sources window without selecting an Alarm Source. Once a Source is selected, the Sources window closes automatically.

5. Touch the Volume Up and Down buttons on the Volume bar to set the alarm volume for the selected Source device.
6. Touch "save alarm" to save your changes and return to the *Alarms* page.

Removing an Alarm

Once an alarm has been set for this Zone, the "Remove Alarm" option is enabled (FIG. 92).



FIG. 20 Alarms page - Remove Alarm

Touch **Remove Alarm** to remove the alarm for the selected Zone.

SWT Troubleshooting

Overview

This section provides troubleshooting for the SWT Metreau keypads (DAS-MET-6SRC and DAS-MET-NUM).

Symptom	Possible Causes	Section
Everything is dead	Power	Power
All keypads are dead	Power-cabling between MRC and keypad incorrect.	Power
(No lights)	Keypad connections reversed.	Keypad cabling
Some keypads ok, some dead.	Cabling between MRC & keypad shorted. Keypad connections reversed. Defective keypad. Defective cable.	Keypad Cabling. Restart system.
Sources don't work manually or automatically	Power	Power
Sources and keypads work but no sound in zone.	Speakers not connected. Problem between keypad and speakers. Problem with speakers. Volume too low.	Keypad Cabling Source Cabling
Sources and keypads work but no sound in zone.	RCA cables from source inserted into the source outputs.	Source Cabling
Sources work manually but keypads don't control device.	Device programming incomplete. Infrared emitter lead missing. IR emitter lead connected to wrong device.	Programming. Source cabling. Restart system.
Sources power off when selected.	Program error in ON/ OFF function.	Programming
Sources don't start playing when selected.	Program error in device select function.	Programming

Power Connections

Tracking down problems that are power related are somewhat easy because the unit either powers up or it doesn't. If it does not, there are several things to check.

1. Check to make sure you are attached to a functioning live electrical circuit. If the branch circuit is dead check the breaker or there may be a light switch controlling the power to the outlet. If it's on a switched circuit try to obtain power elsewhere.
2. Ensure that both ends of each power cord are firmly seated in all of the source components.
3. If you're plugged into power strips, check them for operation as well. Be aware these often have mini-breakers on them and you should check to ensure that power is functioning in EACH outlet.
It is not uncommon for the inexpensive power strips to fail at one plug-in but not the others.
4. There is a power switch located at the rear of the Controller, check to see that it is in the ON or (1) position.
5. There is a fuse beside the power switch at the back of the Controller. Remove the fuse and inspect it to see that it is intact. If you have an ohm meter, test for continuity across the fuse (sometimes they look good, but they're really broken near one of the ends). If you are using a power bar they often have mini-breakers on them, and you should check to ensure that all is well. The fuse in the rear of the Unit is a **T8AL250v**.

Zone Connection Problems

If there is wall power and both the source components and the Controller seem to be powering up OK, but one or more of the zones are not working, there may be a problem at the individual zone or with the cabling connecting to the zone. Begin by checking each zone keypad for functionality by pressing the desired source button. The LED should light red next to the source on the KP-4e keypads or should “wake up” with a screen menu on the touch panel keypad.

Dead Zones

There is power and the source devices and the Tango Controller seem to be powering up OK, but one or more of the zones are not working.

Check each zones keypad for functionality by pressing the desired source button. The LED should light Red next to the source.

LED Does Not light

You are not getting power and command connectivity to the zone. Check other zones and select each source to determine if this is specific to the source or the room in general. If the problem is in a particular room then there may be an issue with cabling to your speakers or it may be the keypad itself. If you get similar results for a particular source in multiple zones then there may be an issue with the source equipment and you should check to see that the selected source is ‘playing’. If every other zone is ok, check to make sure cables to the speakers are secure and that you have tried to increase the volume level in the zone.

Possible Causes:

- Zone connectors at Tango Controller are not secure.
- Connector at Keypad to Tango Controller is not secure.
- Wiring standard not followed. Make certain the center two wires are in the same orientation at the Tango Controller and the keypad. They may have been inadvertently reversed during the installation.
- Input and output connectors on keypad are reversed.
- Keypad not recognized by system. Restart system.

Source Connections

Problems in source cabling display some of the following characteristics.

- The source cannot be heard in any zone.
- The source doesn’t seem to respond to keypad commands.

Ensure that the sources LINE OUT connections are connected to the Tango Controllers LINE IN connections for the correct device. Check to see that the IR emitter lead is securely fastened to the IR receiver on the audio source and that you have the lead plugged into the appropriate IR output jack (FIG. 93).

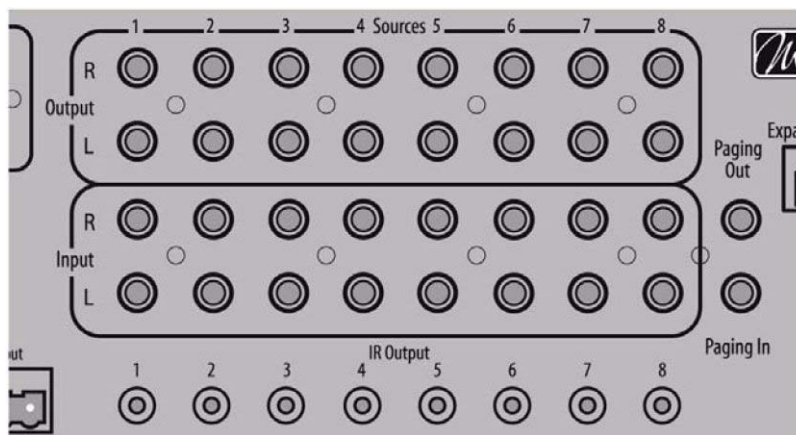


FIG. 1 Rear View – Source in/out – IR Out

When a keypad command is received and communicated to the source device, there is a LED that lights on the front of the Tango Controller indicating the processing of the command. If the LED does not light with a keypad press, then it is possible that the device has not been programmed. If the LED does light, there may be a problem with the infrared emitter lead.

Tip: For Testing, when you are having IR problems, it is helpful to carry a blinking emitter or a test emitter to ensure that the commands are being sent to the source. Techniques you can use to help isolate a sources problem include swapping the source with another on the Tango Controller to see if the problem stays with the Controller or follows the movement of the source. Also try swapping IR emitter leads. Take a look at the source to ensure that no MUTE functions have been accidentally activated.



If you connect a keypad while the Controller is on you must restart the Controller for that keypad to become active.

No Keypad Activity

You are not getting power and command connectivity to the zone. Some of the possible causes are:

- Verify that the AxLink address is set to 0 (zero).
- Zone connectors at the Controller are not secure.
- Connector in the wall at keypad to Controller is not secure.
- Wiring and connection directions not followed. Make certain the center two wires (DATA and GROUND) are in the same orientation at the Controller and the keypad.
- Connectors on keypad from Controller and speakers are reversed.
- Keypad not recognized by system. Restart system.

Keypad Lights, No Sound

Power and command connectivity are getting to the zone. Check other zones and select each source to determine if this is specific to the source or the room in general. If the problem is in a particular room then there may be an issue with cabling to the speakers or it may be the keypad itself. If you get similar results for a particular source in multiple zones then there may be an issue with the source equipment and you should check to see that the selected source is 'playing'. If every other zone is OK, check to make sure cables to the speakers are secure and that you have tried to increase the volume level in the zone.



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